SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, 1934

No. 648

HAROLD E. WEST, J. FRANK HARPER AND STEUART PURCELL, CONSTITUTING THE PUBLIC SERVICE COMMISSION OF MARYLAND, APPELLANTS,

vs.

CHESAPEAKE AND POTOMAC TELEPHONE COMPANY OF BALTIMORE CITY

APPEAL FROM THE DISTRICT COURT OF THE UNITED STATES FOR THE DISTRICT OF MARYLAND

VOL. II

INDEX

	Original	Print
Plaintiff's exhibits—		
A-11—Western Electric supply contract of 1882.....	1158	645
A-12—Western Electric supply contract of 1908....	1164	653
A-13—Chart showing division of total Western Electric Company sales by main apparatus classes between Bell and non-Bell customers—1916-1933..	1169	660
A-14—Chart showing division of total Western Electric Company sales by main apparatus classes between Bell and non-Bell customers—1926-1933....	1170	660
A-15—Chart showing Western Electric Company sales to Bell and non-Bell customers—1916-1933..	1171	660

JUDD & DETWEILER (INC.), PRINTERS, WASHINGTON, D. C., FEBRUARY 23, 1935.

—6006-C

	Original	Print
A-16—Chart showing Western Electric Company sales, by main classes and in total, to Bell customers—1916-1933	1172	660
A-17—Western Electric sales, net profits and average investment—Bell business—1916-1932	1173	661
A-18—Return on investment of 88 manufacturing companies—1925-1932	1174	662
A-19—Net profits to sales of 38 manufacturing companies—1925-1932	1176	664
A-20—Estimated effect of Western Electric Company price changes 1921-1933 on new apparatus and equipment sold to Bell Companies	1177	665
A-21—Western Electric supply contract dated June 2, 1930, with amendments	1178	666
A-22—Western Electric sales of telephone apparatus and lead-covered cable to Graybar Electric Company—1925-1933	1194	677
A-23—Comparison of Western Electric prices on telephone apparatus to Bell Companies under supply contract with lowest advertised prices in general trade on comparable apparatus—1925-1932	1195	678
A-24—Comparison of Western Electric prices for step-by-step equipment to Bell Companies under supply contract with prices of Automatic Electric Company to general trade—1929-1933	1200	683
A-25—Comparison of Western Electric prices on cable to non-Bell and Bell customers—1925-1932	1203	686
A-26—Comparison of prices paid Western Electric by Bell customers for apparatus and equipment and lead-covered cable with lowest prices in general trade—1924-1932	1205	688
A-27—Comparison of actual cost of telephone material to independent companies with Western Electric prices under supply contract	1210	700
A-28—Comparison of Western Electric prices to Bell Companies on supplies not of Western Electric manufacture with prices on corresponding material in general trade—December 31, 1933	1214	705
A-29—Statement as to Missouri-Illinois sleet storm of 1924	1216	710
A-30—Book cost and units of property—December 31, 1932, and December 31, 1933	1217	712
A-31—Estimated reproduction cost new and estimated reproduction cost less depreciation, December 31, 1932	1340	736
A-32—Estimated reproduction cost new and estimated reproduction cost less depreciation, December 31, 1933	1355	753
A-33—Working capital as of December 31, 1932 and December 31, 1933	1367	756

	Original	Print
A-34—Per cent condition of physical property as of December 31, 1932, and December 31, 1933, exclusive of land and buildings	1374	763
A-35—Taxes during construction and interest during construction, December 31, 1932	1375	765
A-36—Reproduction cost of establishing the business, December 31, 1932	1379	767
A-37—Chart illustrating divergencies of price trends of items comprising the miscellaneous group of the Bureau of Labor Statistics wholesale commodity price index	1381	768
A-38—Method of determining depreciation accrual rates	1382	769
A-39—Schedule of rates for annual depreciation charges effective April 1, 1933 (with supporting data)	1388	775
A-40—Depreciation expense. Associated companies of Bell system. Comparison of actual 1933 charges to depreciation account with amounts based on current depreciation rates of The Chesapeake & Potomac Telephone Company of Baltimore City	1408	793
A-41—American Telephone & Telegraph Company. Average cost of funds used in business, 1933	1415	795
A-42—Principal bond issues of associated companies of the Bell system—10-year period 1922-1931	1416	796
A-43—Revenues, expenses and station statistics—years 1933 and 1934 (estimated)	1417	797
A-44—Summary of evidences of value	1418	798
A-45—Rate of return on evidences of value under existing rates and after effect of Commission order	1419	799
A-46—Chart—Comparison of wage rates	1420	800
A-47—Chart—Comparison of telephone construction costs with construction indexes used by Commission	1421	801
A-48—Book cost, 1914, and net additions trended to 1923 and 1932	1422	802
A-49—Chart—Effect of plant growth on annual realized depreciation	1423	803
A-50—Chart—Trend of Western Electric prices compared with wholesale commodities series, 1914-1934	1424	804
A-51—Chart—Trend of Western Electric prices compared with wholesale commodities series and general trade for telephone apparatus, 1923-1934	1425	805
A-52—Chart—Trend of Western Electric prices compared with wholesale commodities series and general trade for telephone apparatus, 1921-1934	1426	806
A-53—Restatement of Defendants' Exhibit D-8, page 2, comparison of earnings of 442 industrial corporations with Western Electric, 1927-1932	1427	807

	Original	Print
A-54—Weighting of commodities, labor and other items in index numbers applied by Mr. Smith to Telephone Company's investment	1428	808
A-55—Forms and tables used by Interstate Commerce Commission in use of its index numbers	1429	808
A-56—Comparison of one of Commission's "Suggested Values" with Telephone Company's evidences of value by accounts, December 31, 1932	1437	815
Defendants' Exhibits	1438	816
D-2—Historical outline of C. & P. Telephone Co. of Baltimore	1439	816
D-3—Comparison of values in Commission cases	1460	830
Schedule 1—P. S. C. of Md. cases	1461	830
Schedule 2—Cases reported in Public Utilities reports	1462	830
D-4—Balance sheet, original cost, etc.	1464	832
Schedule 1—Balance sheet, Dec. 31, 1932	1465	832
Schedule 2—Analysis of surplus account, 1923-1932	1467	833
Schedule 3—Analysis of pension fund notes, 1927-1932	1470	835
Schedule 4—Fixed capital accounts	1471	836
Schedule 5—Cost of fixed capital less depreciation reserve	1472	838
Schedule 6—Charges to depreciation reserve	1473	838
Schedule 7—Capital invested in plant by years by accounts	1474	838
D-5—Index number values	1479	839
Schedule 1—Chart showing wholesale commodity prices, 1750-1932	1479	840
Schedule 2—Component index numbers of the wholesale commodity series of the Department of Labor, December, 1933	1480	841
Schedule 3—Chart showing effect of abandonment of gold standard on English commodity prices	1481	842
Schedule 4—Application of wholesale commodity index numbers of the Department of Labor to total assets—court method	1482	843
Schedule 5—Application of wholesale commodity index numbers of the Department of Labor to fixed capital	1483	844
Schedule 6—Map from Western Electric pamphlet, "From the Far Corners of the Earth," showing commodities entering into manufacture of telephone materials	1489	848
Schedule 7—Application of commodity index of National Association of Purchasing Agents to fixed capital	1490	849
Schedule 8—Application of Fishers commodity index to fixed capital	1491	849

	Original	Print
Schedule 9—Application of Dun's index to fixed capital	1492	850
Schedule 10—Application of Bradstreet's index to fixed capital	1493	851
Schedule 11—Application of Federal Reserve Bank of New York index to fixed capital	1494	851
Schedule 12—Chart comparing wholesale commodity index of the Department of Labor with McGill, annalist, and National Fertilizer Association	1495	852
Schedule 13—Application of building materials index of Department of Labor to fixed capital	1496	853
Schedule 14—Application of building materials index of the National Association of Purchasing Agents to fixed capital	1500	855
Schedule 15—Application of construction index of American Appraisal Company to fixed capital	1501	855
Schedule 16—Application of construction index of Consolidated Engineering Co. to fixed capital	1503	857
Schedule 17—Application of construction index of Turner Construction Co. to fixed capital	1505	858
Schedule 18—Development of index for Baltimore wages and application of the index to fixed capital	1507	860
Schedule 19—Approximate proportion of labor and material in fixed capital additions, 1924-1932	1511	861
Schedule 20—Application of Smith's construction index (Smith's Baltimore wages and Department of Labor building materials combined) to fixed capital	1512	862
Schedule 21—Application of construction index of Engineering News-Record to fixed capital.	1513	863
Schedule 22—Application of Richey's index to fixed capital	1516	865
Schedule 23—Application of I. C. C. telegraph and telephone line index to fixed capital	1519	867
Schedule 24—Application of index developed from Western Electric price changes (recognising no price increase since 1929) to fixed capital	1522	868
Schedule 25—Value by accounts	1523	870
Schedule 26—Computation of value as of December 31, 1933, by the various index numbers	1524	871
Schedule 27—Value of intrastate property	1525	872
Schedule 28—Chart comparing Telephone Company composite and Commission fair value trend with other series and composite trends.	1526	872
D-6—Overheads included in original cost	1527	873

	Original	Print
D-7—Depreciation reserve	1531	875
D-8—Earnings of Western Electric Company	1534	877
D-9—Working capital	1538	877
D-10—Comparison of suggested values	1540	881
D-11—Revenues, expenses, and real income	1541	882
D-12—Rate of return	1555	896
D-13—Chart comparing component parts of American Appraisal Company's index and the Department of Labor building materials index	1577	920
D-14—Company's estimate of revenues and expenses for 1934 after adjustments to depreciation expense and income tax	1578	921
D-15—Pamphlet copy of opinion and order of the P. S. C. of Maryland in Case 690, dated March 8, 1916	1581	923
D-16—Pamphlet copy of opinion and order of the P. S. C. of Maryland in Case 1709, dated August 18, 1920	1687	1029
D-17—Pamphlet copy of license contract between The Chesapeake and Potomac Telephone Co. of Baltimore City and American Telephone and Telegraph Co.	1735	1077
D-18—Chart showing connected subscribers' stations, 1924-1934	1749	1088
D-19—Computation of depreciation expense, 1932	1750	1089
D-20—Chart showing growth in company stations, 1910-1934	1751	1090
D-21—Current annual depreciation accrual rates and computation of annual expense for 1932	1752	1091
Clerk's certificate (omitted in printing)	1753	
Statement of points to be relied upon and stipulations as to printing record	1754	1093

[fol. 1158] PLAINTIFF'S EXHIBIT A-11

C. & P. TEL. CO. OF B. C.

v.

WEST et al.

U. S. Dist. Ct. Eq. No. 2240

Witness: J. K. Crosland. Date: 3-4-34. Rec. p. 516.

Copy

This Agreement made this sixth day of February, A. D. 1882, by and between The American Bell Telephone Company, a corporation created and existing under the laws of the Commonwealth of Massachusetts, of the first part, and the Western Electric Company, a corporation created and existing under the laws of the State of Illinois, of the second part, witnesseth:

Whereas said second party desires to be employed by said first party to manufacture the telephones required by it, said first party, and to be licensed to manufacture telephonic appliances and apparatus other than telephones under letters-patent now owned or controlled or which may hereafter be owned or controlled by said first party, and whereas said second party owns certain inventions, patents, and rights under patents, relating to telephones and telephonic appliances—

Now therefore it is agreed:

1. Said second party agrees that it will, if said first party shall elect to purchase the same at any time within six months from the date hereof, sell, assign, and transfer to the first party at the actual cost thereof to it, said second party, either, or any, or all the inventions in electrical speaking telephones, or improvements therein, or applicable thereto, which it said second party now owns, and further that it said second party will from time to time, if and whenever it shall acquire any inventions in electric speaking telephones, or improvements therein, or applicable thereto, forthwith notify said first party thereof and that it will, in case said first party shall elect to purchase

the same within six months after such notice sell, assign, and transfer the same to said first party at the actual cost thereof to said second party.

The word "telephone" as used in this contract includes all instruments employed for the electrical transmission of articulate speech, including therein all attachments and devices which serve to cause, to improve, or to modify the articulating current or the effects thereof.

2. Said first party agrees that it will employ said second party during the existence of this contract to manufacture telephones required by it, The American Bell Telephone Company, whether for use in the United States, or for export, upon the terms and conditions following, that is to say:

Said telephones shall be manufactured only at such of the manufactories of said second party as said first party may from time to time designate.

At all times during their manufacture and upon their completion the instruments and the materials employed shall be subject to the inspection and acceptance of Superintendents and inspectors appointed by said first party.

The price to be paid therefor shall be the actual cost thereof with an addition of twenty per cent of such cost as manufacturer's profit.

[fol. 1159] Said second party shall promptly manufacture and supply all telephones ordered by said American Bell Telephone Company and shall provide itself with facilities for making them in such quantities as the course of business may demand.

Said telephones shall be of such patterns and styles and shall embody such inventions and improvements as said first party may from time to time prescribe and shall be made in all respects as they shall direct as to style, material, workmanship and finish.

In addition to the patent marks and figures said telephones shall bear such other marks and figures as said American Bell Telephone Company shall from time to time direct and no others.

Said manufacture shall be subject to such regulations as may in the opinion of the first party be necessary for its protection and as it shall from time to time prescribe to said second party.

Except as in this Article provided for the second party shall not engage in the manufacture of telephones within the United States.

Said second party faithfully complying with the terms of this employment, said first party agrees that it will during the existence of this contract employ no others to manufacture telephones.

3. Said second party hath granted and doth hereby grant to the first party the sole and exclusive right and license during the full term for which patents thereon have been or may be granted to make, use, and sell, and to license others, except only the existing licensed manufacturers of said first party named in Article 4 hereof, to make, use, and sell, in call bells, switches and other telephonic appliances, any inventions or improvements therein which it said second party does now or may hereafter own or control, in whole or in part, by contract or otherwise, whether patented or not, "Telephonic appliances" include calls, switches, switch boards, annunciators, exchange furniture, and other apparatus and devices adapted for use on or for telephone lines, except telephones as above defined.

The second party agrees that it will from time to time and at all times do, execute and deliver such other and further acts and instruments, if any, as may be necessary to secure to and vest in said first party such sole and exclusive right and license.

4. Said first party hereby grants and agrees to grant (subject however as to inventions hereafter directly acquired by said first party to the provisions of j of this article) to the second party a license exclusive except as hereinafter stated upon the terms and conditions and subject to the limitations herein expressed during the full term for which letters-patent thereon have been or may be granted to make and to sell call bells, switches and other telephonic appliances as above defined embodying any inventions or improvements thereon which it said first party does now or may hereafter own or control (including herein the inventions and improvements licensed to it, said first party, by said second party in the previous article hereof); but said second party shall and said second party hereby agrees that it will

[fol. 1160] (a) Assume and pay or discharge any and all royalties and other obligations which said first party is or may be bound to pay or perform on or on account of said inventions or any of them.

(b) Within the United States sell such apparatus only to the licensees of telephone of the American Bell Telephone Company and to them at prices not exorbitant or unreasonable, and under the terms and limitations hereinafter stated, such prices are to be uniform for the different classes of Licensees of said American Bell Telephone Company.

(c) In selling such appliances for use in foreign countries it will in each case retain the title thereto until they are landed in the foreign country to which they are sent: and will insert in its bill heads therefor the following, or such similar notice as the first party may require viz:

"The articles herein named are to remain the property of the Western Electric Company until landed in ——. It is understood and agreed to by the purchaser that no right to use the articles herein named in the United States, and no right to use any patents whatever granted by the United States is conveyed hereby, no consideration having been paid for such use."

and will insert in its bill heads for appliances which it is authorized to sell to Licensees of the American Bell Telephone Company in the United States the following or such similar notices as the first party may require viz:

"The call bells and other telephonic appliances included in this bill are made under patents which belong to the American Bell Telephone Company or which they have the exclusive right to use, and are only licensed to be used in connection with telephones licensed by said Company and at Stations using such telephones and the purchaser by accepting them agrees not to use them otherwise nor to dispose of them to anyone except those so licensed."

and will conform to such other similar regulations as said first party may reasonably require for its protection and may from time to time prescribe to said second party.

(d) Mark such apparatus in addition to the patent numbers and marks with such other numbers, marks, notices, or

names, and no others, and in such manner as said first party shall from time to time prescribe.

(e) Promptly manufacture and supply all such apparatus as it is hereby authorized to supply, and of such patterns and styles and embodying such inventions and improvements as may be ordered by the parties to whom it is authorized to dispose of the same; and will provide itself with facilities for making such apparatus in such quantities as the course of business may demand.

(f) Will on the first days of January and July in each year during the continuance hereof, make full and true returns under oath of all and singular the telephonic appliances and apparatus manufactured hereunder.

(g) And except as in this article provided shall not engage in the manufacture of telephonic appliances within the United States.

[fol. 1161] (h) The party of the second part agrees that all instruments or apparatus manufactured under this license shall be of the most approved forms and first class in point of material finish and workmanship and shall be subject to the inspection of the party of the first part.

(i) The license hereby granted is not exclusive as to inventions or improvements in cables, conductors, insulators, or the manner of constructing and arranging lines (apart from switches and instruments) and

The rights in this article granted are subject to the existing rights of Post and Company of Cincinnati Ohio under contract dated June 27, 1879, with the National Bell Telephone Company; of Davis and Watts of Baltimore, Maryland under contract dated June 24, 1879, with the National Bell Telephone Company; of the Electric Merchandising Company under contract dated June 11, 1879, with the National Bell Telephone Company; and to the manufacturing rights of the Telephone and Telegraph Construction Company under contract dated October 24, 1877, with Gardiner G. Hubbard, Trustee. But the first party agrees that it will within six months after request therefor from said second party give notice to terminate such of said last named contracts as can be so terminated as therein provided; and it is agreed that the second party shall until such termination be entitled to receive all royalties accruing

to the first party thereunder after July 1, 1881, on account of manufactures less only royalties which said first party may be bound to pay on account thereof.

(j) In case said first party shall hereafter acquire any invention or inventions in telephone appliances as above defined, other than such as it may hereafter acquire by license from the second party under Article 3 hereof, it shall forthwith notify said second party thereof, and such invention or inventions shall in case said second party shall so elect within six months from the date of such notice, come under the provisions of this Article 4 hereof with like effect as if such invention or inventions were now owned by said first party, but the second party, in case it shall elect to have such license, shall forthwith upon making such election repay to said first party the cost of such invention or inventions and assume any and all royalties and other obligations which said first party may be bound to pay or perform on or on account of such invention or inventions.

5. Whereas the due prosecution of the business of said Telephone Company and of its licensees, users of its telephones, requires that telephones and telephonic appliances of the most approved forms and workmanship be promptly furnished and as herein provided, and whereas the said Telephone Company is unwilling to permit the reasonable expectations of its licensees in this regard to be disappointed, and whereas the time required to ascertain judicially whether the second party shall or shall not have failed to perform its obligations hereunder would cause a delay which might work great irreparable and unascertainable damage to said Telephone Company and its said licensees, now it is an integral part of this contract and is also a limitation of and an exception to the license hereby granted and the employment hereby contracted for that—

[fol. 1162] (1) Whenever the directors or executive committee of said telephone company shall be of opinion that the second party has failed in its obligations in this respect; or that there is imminent danger or probability that it will so fail, the said telephone company may without notice or demand, forthwith manufacture or cause to be manufactured elsewhere, either by itself or others, such instruments as in its opinion may be required to meet the emergency, and may continue and prepare to continue such manufac-

ture elsewhere so long as in its opinion may be needful; and for the purpose of obtaining such supply, the opinion of its directors or its executive committee, arrived at in good faith, shall be conclusive as to its right so to obtain a supply elsewhere, and its action based thereon, shall not be restrained by any court or judicial power whatever, but such decision shall not terminate this contract and license, nor shall it prevent the second party from furnishing apparatus to any persons who may lawfully order the same according to the terms hereof.

(2) If it shall thereafter be determined by agreement of the parties or by the final judgment of any Court of competent jurisdiction that the opinion so acted on by said telephone company was erroneous, then the consequences of such error shall be that said telephone company shall pay to said second party all the profits which it, said second party, would actually have realized and received if such supply so obtains elsewhere had been obtained of said second party and said decision of said telephone company shall not authorize it thereafter to obtain such supply elsewhere.

(3) If it shall be determined by agreement of the parties or by the final judgment of any court of competent jurisdiction that said second party did violate or fail to comply with, or has violated or failed to comply with any of the terms of this agreement then this license to manufacture telephonic appliances shall be deemed to have been non-exclusive and the obligation to employ the second party to manufacture telephones to have ceased as from the time of such violation or default and said license shall remain non-exclusive and the first party shall be under no obligation to employ the second party to manufacture telephones unless and until said second party shall upon notice from said first party have remedied or repaired such default, violation or neglect and shall have repaid and made good to said first party any and all loss, cost, damage, and expense occasioned thereby or resulting therefrom, and shall reasonably satisfy said first party that it is prepared and intends to conform hereto, whereupon said license shall again become exclusive and the obligation to employ the second party to manufacture telephones shall revive, such license and such employment being however subject to all the terms, condi-

tions, limitations, and stipulations, inclusive of this article, herein contained.

6. Existing interferences in cases of inventions in telephonic appliances shall be disposed of as counsel of the parties hereto may advise, to recognize and protect the rights of the several inventors to their respective inventions, subject to the decisions of the Patent Office.

7. The first party agrees that it will, so long as and in so far as the license herein granted the second party is and shall remain exclusive, consent to the use of its name either alone or together with that of the second party as the case may require, in all such suits as counsel of the parties may advise are necessary or proper for the protection of such rights against infringement, but the whole expense of such litigation shall be borne by the second party.

[fol. 1163] 8. This contract shall remain in force until it shall be determined by the mutual agreement of the parties hereto.

In witness whereof The American Bell Telephone Company has caused these presents to be signed in its name and behalf by William H. Forbes its President and its corporate seal to be hereto affixed and the Western Electric Company has caused these Presents to be signed in its name and behalf by Anson Stager its President and its corporate seal to be hereto affixed the day and year first above written.

(Before the execution hereof the following interlineations were made viz: On page 2, the word "employment" (substituted for the word "Agreement" erased), the word "thereon", and the word "except only the existing licensed manufacturers of said first party named in article 4 hereof"; on page 3 the words "or perform"; on page 4 the words "to the manufacturing rights" and at the end of paragraph (i) the words "on account of manufactures less only royalties which said first party may be bound to pay on account thereof"; on page 4 the words "or perform" and the word "said"; on page 5 the words "or has violated or failed to comply with".)

The American Bell Telephone Company, by (Sgd.) W. H. Forbes, President. (Seal.)

Western Electric Company, by (Sgd.) Anson Stager, President. (Seal.) Attest: S. G. Lynch, Secretary.

[fol. 1164] PLAINTIFF'S EXHIBIT A-12

C. & P. TEL. CO. OF B. C.

v.

WEST. et al.

U. S. Dist. Ct. Eq. No. 2240

Witness: J. K. Crosland. Date: 3-19-34. Rec. p. 518

Memorandum of an Agreement made this eighth day of April, 1908, between The American Bell Telephone Company, a corporation organized under the laws of Massachusetts, of the first part, and the Western Eelectric Company, a corporation organized under the laws of Illinois, of the second part, witnesseth:

That whereas the parties hereto executed on the 6th day of February, 1882, a certain contract relating to the manufacture of telephones and telephonic apparatus and it is desired that certain changes be made in said contract—

Modified Contract

This Agreement, made this sixth day of February, A. D. 1882, by and between The American Bell Telephone Company, a corporation created and existing under the laws of the Commonwealth of Massachusetts, of the first part, and the Western Electric Company, a corporation created and existing under the laws of the State of Illinois, of the second part, witnesseth:

Whereas said second party desires to be employed by said first party to manufacture the telephones required by it, said first party, and to be licensed to manufacture telephonic appliances and apparatus other than telephones under letters patent now owned or controlled, or which may hereafter be owned or controlled by said first party and whereas, said second party owns certain inventions, patents and rights under patents, relating to telephones and telephonic appliances;

Now, Therefore, it is agreed:

1. Said second party agrees that it will, if said first party shall elect to purchase the same at any time within

six months from the date hereof, sell, assign and transfer to the first party at the actual cost thereof to it, said second party, either, or any, or all the inventions in electrical speaking telephones, or improvements therein, or applicable thereto, which it, said second party, now owns, and further, that it, said second party, will from time to time, if and whenever it shall acquire any inventions in electric [fol. 1165] speaking telephones, or improvements therein, or applicable thereto, forthwith notify said first party thereof, and that it will, in case said first party shall elect to purchase the same within six months after such notice sell, assign and transfer the same to said first party at the actual cost thereof to said second party.

The word "telephone" as used in this contract includes all instruments employed for the electrical transmission of articulate speech, including therein all attachments and devices which serve to cause, to improve, or to modify the articulating current or the effects thereof.

2. Said first party agrees that it will employ said second party during the existence of this contract to manufacture telephones required by it, The American Bell Telephone Company, whether for use in the United States, or for export, upon the terms and conditions following, that is to say:

Said telephones shall be manufactured only at such of the manufactories of said second party as said first party may from time to time designate.

At all times during their manufacture and upon their completion the instruments and the materials employed shall be subject to the inspection and acceptance of Superintendents and inspectors appointed by said first party.

The price to be paid therefor shall be the actual cost thereof with an addition of twenty per cent of such cost as manufacturer's profit.

Said second party shall promptly manufacture and supply all telephones ordered by said American Bell Telephone Company, and shall provide itself with facilities for making them in such quantities as the course of business may demand.

Said telephones shall be of such patterns and styles and shall embody such inventions and improvements as said first party may, from time to time, prescribe and shall be

made in all respects as they shall direct as to style, material, workmanship and finish.

In addition to the patent marks and figures, said telephones shall bear such other marks and figures as said American Bell Telephone Company shall from time to time direct and no others.

Said manufacture shall be subject to such regulations as may in the opinion of the first party be necessary for its protection, and as it shall from time to time prescribe to said second party.

Except as in this article provided for the second party shall engage in the manufacture of telephones within the United States only under such restrictions as the first party may from time to time impose.

Said second party faithfully complying with the terms of this employment, said first party agrees that it will during the existence of this contract employ no others to manufacture telephones.

3. Said second party hath granted and doth hereby grant to the first party the sole and exclusive right and license during the full term for which patents thereon have been or may be granted to make, use and sell, and to license others, except only the existing licensed manufacturers of said first party named in Article 4 hereof, to make, use, and sell, in call bells, switches and other telephonic appliances, any inventions or improvements therein which it said second party does now, or may hereafter, own or control, in whole or in part, by contract or otherwise, whether patented or not. "Telephonic appliances" include calls, switches, switchboards, annunciators, exchange furniture, and other apparatus and devices adapted for use on or for telephone lines, except telephones as above defined.

[fol. 1166] The second party agrees that it will from time to time and at all times do, execute, and deliver such other and further acts and instruments, if any, as may be necessary to secure to and vest in said first party such sole and exclusive right and license.

4. Said first party hereby grants and agrees to grant (subject, however, as to inventions hereafter directly acquired by said first party to the provisions of (i) of this Article) to the second party a license exclusive except as hereinafter stated upon the terms and conditions and sub-

ject to the limitations herein expressed during the full term for which letters patent thereon have been or may be granted to make and to sell call bells, switches and other telephonic appliances as above defined embodying any inventions or improvements thereon which it said first party does now, or may hereafter, own or control (including herein the inventions and improvements licensed to it, said first party, by said second party, in the previous Article hereof); but said second party shall, and said second party hereby agrees, that it will

(a) Assume and pay or discharge any and all royalties and other obligations which said first party is or may be bound to pay or perform on or on account of said inventions or any of them.

(b) Within the United States sell such apparatus to the licensees of telephones of The American Bell Telephone Company at prices not exorbitant or unreasonable and under the terms and limitations hereinafter stated; such prices are to be uniform for the different classes of licensees of said American Bell Telephone Company—and to sub-licensees and non-licensees of said American Bell Telephone Company only under such restrictions as the first party may from time to time impose.

(c) Mark such apparatus in addition to the patent numbers and marks with such other numbers, marks, notices or names and in such manner as said first party shall from time to time prescribe.

(d) Promptly manufacture and supply all such apparatus as it is hereby authorized to supply, and of such patterns and styles, and embodying such inventions and improvements as may be ordered by the parties to whom it is authorized to dispose of the same; and will provide itself with facilities for making such apparatus in such quantities as the course of business may demand.

(e) Will, during the continuance hereof, make full and true returns under oath of all and singular telephonic appliances and apparatus manufactured hereunder if and when such return may be required by the first party.

(f) And except as in this article provided shall engage in the manufacture of telephonic appliances within the United States only under such restrictions as the first party may from time to time impose.

(g) The party of the second part agrees that all in-

struments or apparatus manufactured under this license shall be of the most approved forms and first class in point of material, finish and workmanship, and shall be subject to the inspection of the party of the first part.

(h) The license hereby granted is not exclusive as to inventions or improvements in cables, conductors, insulators, or the manner of constructing and arranging lines (apart from switches and instruments) and

The rights in this article granted are subject to the existing rights of Post and Company of Cincinnati, Ohio, under contract dated June 27, 1879, with the National Bell Telephone Company; of Davis and Watts of Baltimore, Maryland, under contract dated June 24, 1879 with the National Bell Telephone Company; of the Electric Merchandising Company under contract dated June 11, 1879, with the National Bell Telephone Company; and to the manufacturing rights of the Telephone and Telegraph Construction Company, under contract dated October 24, 1877 with Gardiner G. Hubbard, Trustee. But the first party agrees that it will within six months after request therefor from said [fol. 1167] second party give notice to terminate such of said last named contracts as can be so terminated as therein provided; and it is agreed that the second party shall until such termination be entitled to receive all royalties accruing to the first party thereunder after July 1, 1881, on account of manufactures, less only royalties which said first party may be bound to pay on account thereof.

(i) In case said first party shall hereafter acquire any invention or inventions in telephone appliances as above defined, other than such as it may hereafter acquire by license from the second party under Article 3 hereof, it shall forthwith notify said second party thereof, and such invention or inventions shall in case said second party shall so elect within six months from the date of such notice come under the provisions of this Article 4 hereof with like effect, as if such invention or inventions were now owned by said first party, but the second party, in case it shall elect to have such license, shall forthwith upon making such election repay to said first party the cost of such invention or inventions, and assume any and all royalties and other obligations which said first party may be bound to pay or perform on, or on account of, such invention or inventions.

5. Whereas, the due prosecution of the business of said Telephone Company and of its licensees, users of its telephones, requires that telephones and telephonic appliances of the most approved forms and workmanship be promptly furnished, and as herein provided, and, whereas, the said Telephone Company is unwilling to permit the reasonable expectations of its licensees in this regard to be disappointed and, whereas, the time required to ascertain judicially whether the second party shall or shall not have failed to perform its obligations hereunder would cause a delay which might work great irreparable and unascertainable damage to said Telephone Company and its said licensees, now it is an integral part of this contract and is also a limitation of and an exception to the license hereby granted and the employment hereby contracted for, that

(1) Whenever the directors or executive committee of said Telephone Company shall be of opinion that the second party has failed in its obligations in this respect, or that there is im-inent danger or probability that it will so fail, the said Telephone Company may without notice or demand, forthwith manufacture, or cause to be manufactured, elsewhere, either by itself or others, such instruments as in its opinion may be required to meet the emergency, and may continue and prepare to continue such manufacture elsewhere so long as in its opinion may be needful; and for the purpose of obtaining such supply, the opinion of its directors or its executive committee, arrived at in good faith, shall be conclusive as to its right so to obtain a supply elsewhere, and its action based thereon shall not be restrained by any court or judicial power whatever, but such decision shall not terminate this contract and license, nor shall it prevent the second party from furnishing apparatus to any persons who may lawfully order the same according to the terms hereof.

(2) If it shall thereafter be determined by agreement of the parties, or by the final judgment of any court of competent jurisdiction, that the opinion so acted on by said Telephone Company was erroneous, then the consequences of such error shall be that said Telephone Company shall pay to said second party all the profits which it, said second party, would actually have realized and received if such supply so obtained elsewhere had been obtained of said

second party, and said decision of said Telephone Company shall not authorize it thereafter to obtain such supply elsewhere.

(3) If it shall be determined by agreement of the parties, or by the final judgment of any court of competent jurisdiction, that said second party did violate or fail to comply with, or has violated or failed to comply with any of the terms of this agreement, then this license to manufacture telephonic appliances shall be deemed to have been non-exclusive, and the obligation to employ the second party to manufacture telephones to have ceased as from the time [fol. 1168] of such violation or default, and said license shall remain non-exclusive and the first party shall be under no obligation to employ the second party to manufacture telephones unless and until said second party shall upon notice from said first party have remedied or repaired such default violation or neglect, and shall have repaid and made good to said first party any and all loss, cost, damage and expense occasioned thereby, or resulting therefrom, and shall reasonably satisfy said first party that it is prepared and intends to conform hereto, whereupon said license shall again become exclusive and the obligation to employ the second party to manufacture telephones shall revive, such license and such employment being however subject to all the terms, conditions, limitations and stipulations, inclusive of this Article, herein contained.

6. Existing interferences in cases of inventions in telephonic appliances shall be disposed of as counsel of the parties hereto may advise, to recognize and protect the rights of the several inventors to their respective inventions, subject to the decisions of the Patent Office.

7. The first party agrees that it will, so long as and in so far as the license herein granted the second party is and shall remain exclusive, consent to the use of its name, either alone or together, with that of the second party as the case may require, in all such suits as counsel of the parties may advise are necessary or proper for the protection of such rights against infringement, but the whole expense of such litigation shall be borne by the second party.

8. This contract shall remain in force until it shall be determined by the mutual agreement of the parties hereto.

In witness whereof the parties hereto have caused their respective corporate seals to be hereto affixed and these presents to be signed in their names and behalf by their proper officers thereto duly authorized.

The American Bell Telephone Company, by (Sgd.) Theo. N. Vail, President. Attest: (Sgd.) Chas. Eustis Hubbard, Clerk.

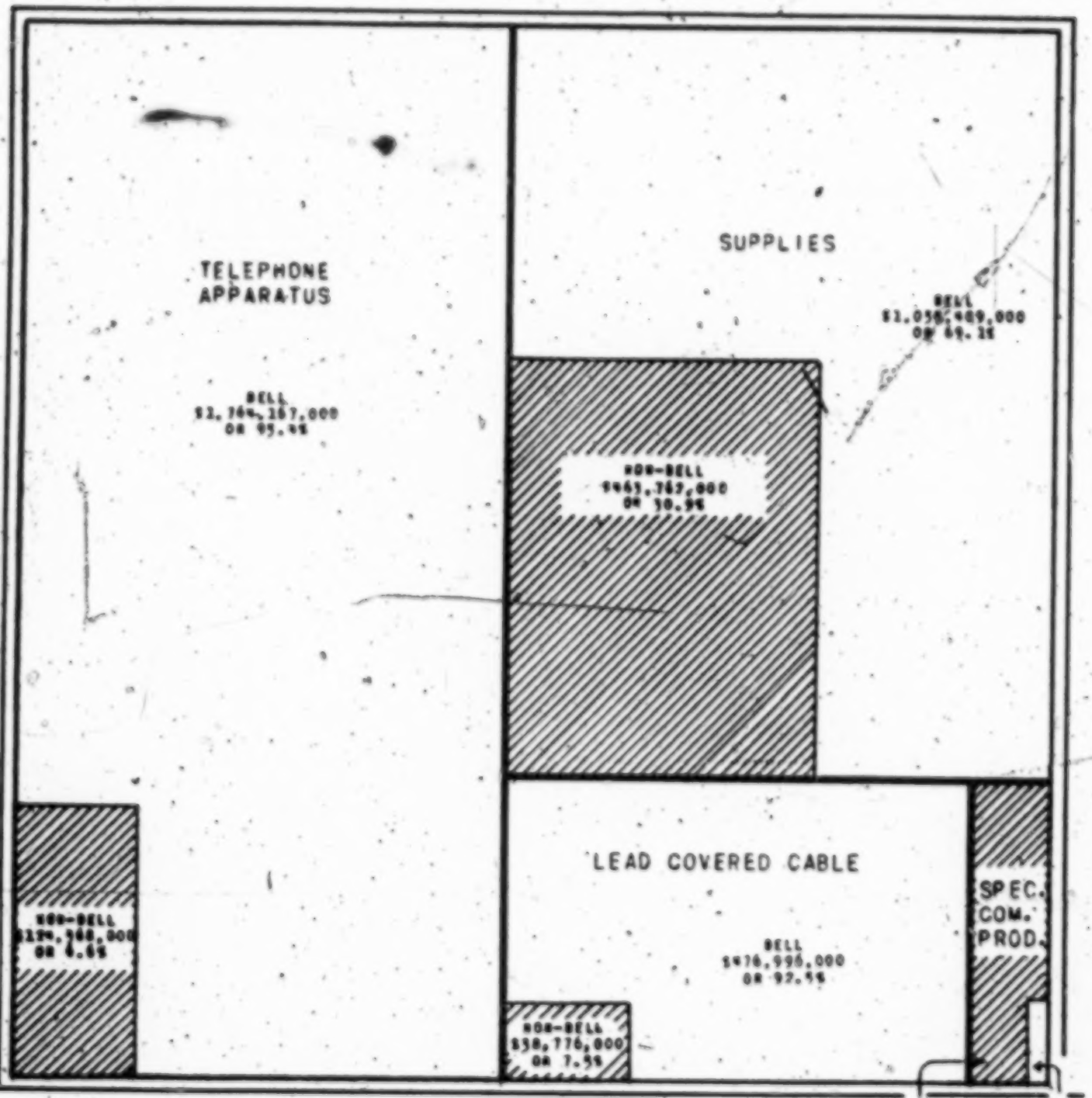
Western Electric Company, by (Sgd.) E. M. Barton, President. Attest: (Sgd.) H. A. Halligan, Secretary.

(Here follow photolithographs of side folios 1169 to 1172, inclusive.)

C & P. TEL. CO. OF B.C.
v. WEST et al.
U.S. DIST. CT. EQ. NO. 2240
Plaintiff's Exhibit A-13
Witness J.A. Crosland
Date 3-9-34 Rec. p. 5345

WESTERN ELECTRIC COMPANY, INC.

DIVISION OF TOTAL SALES BY MAIN APPARATUS CLASSES BETWEEN BELL AND NON-BELL CUSTOMERS 1916 - 1933



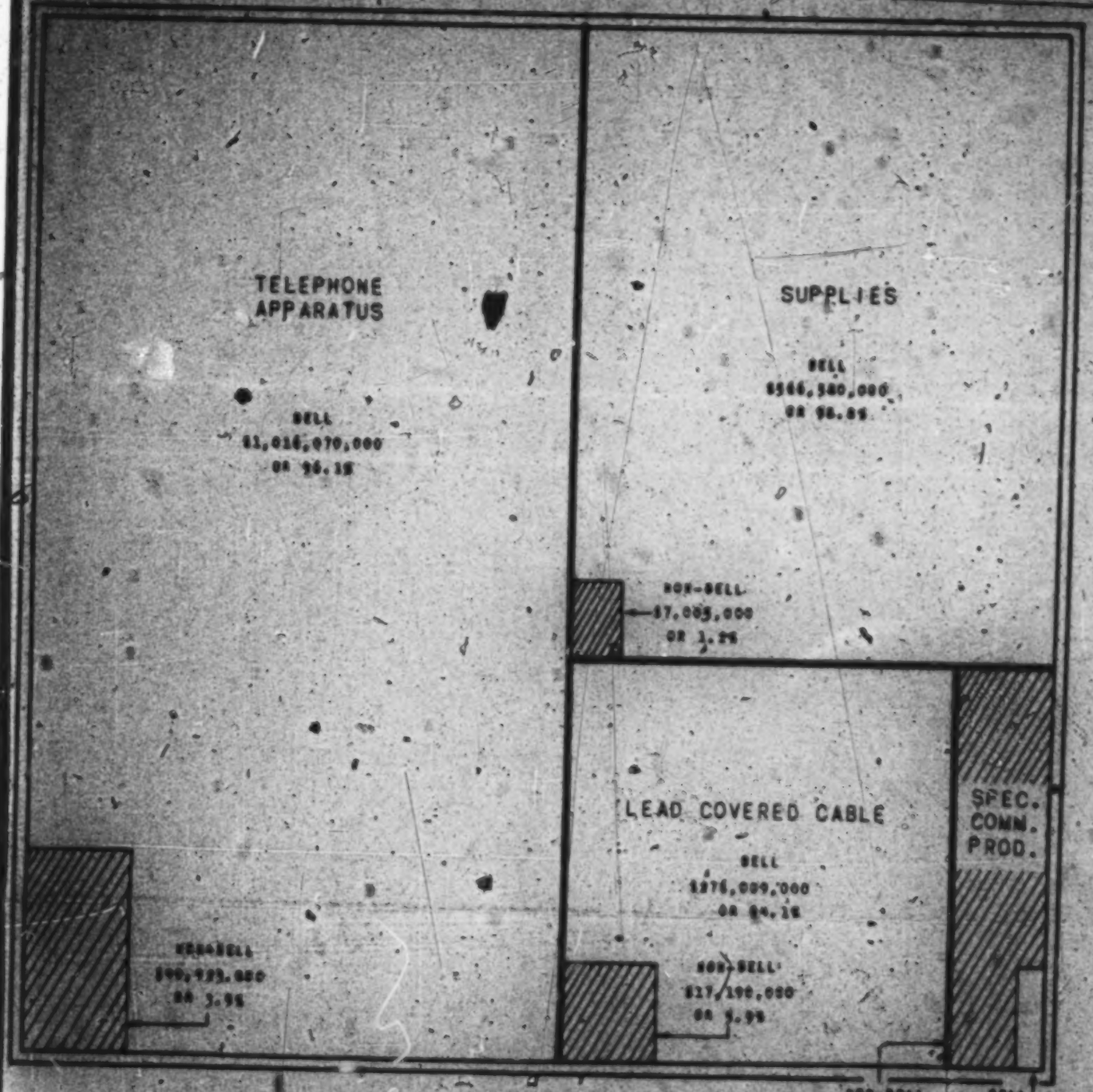
TELEPHONE APPARATUS	$ 2,888,749,000 OR 47.3%		
SUPPLIES	1,499,171,000 OR 37.6%		
LEAD COVERED CABLE	515,772,000 OR 12.9%		
SPECIAL COMMERCIAL PRODUCTS	86,107,000 OR 2.2%		
TOTAL	$ 3,989,799,000 OR 100%		

1169

6604

WESTERN ELECTRIC COMPANY, INC.
DIVISION OF TOTAL SALES BY MAIN APPARATUS CLASSES BETWEEN BELL AND NON-BELL CUSTOMERS
1926 - 1933

C. & P. TEL. CO. OF B. C. v. WEST et al.
U. S. DIST. CT. EQ. No. 2846
Plaintiff's Exhibit No. A 14
Witness J. K. Copeland
Date 2-20-39 Rpr. [illegible]



TELEPHONE APPARATUS	$1,016,993,000	OR	53.0%
SUPPLIES	573,545,000	OR	29.8%
LEAD COVERED CABLE	293,199,000	OR	15.2%
SPECIAL COMMERCIAL PRODUCTS	65,728,000	OR	3.4%
TOTAL	$1,949,305,000	OR	100%

1170

66011

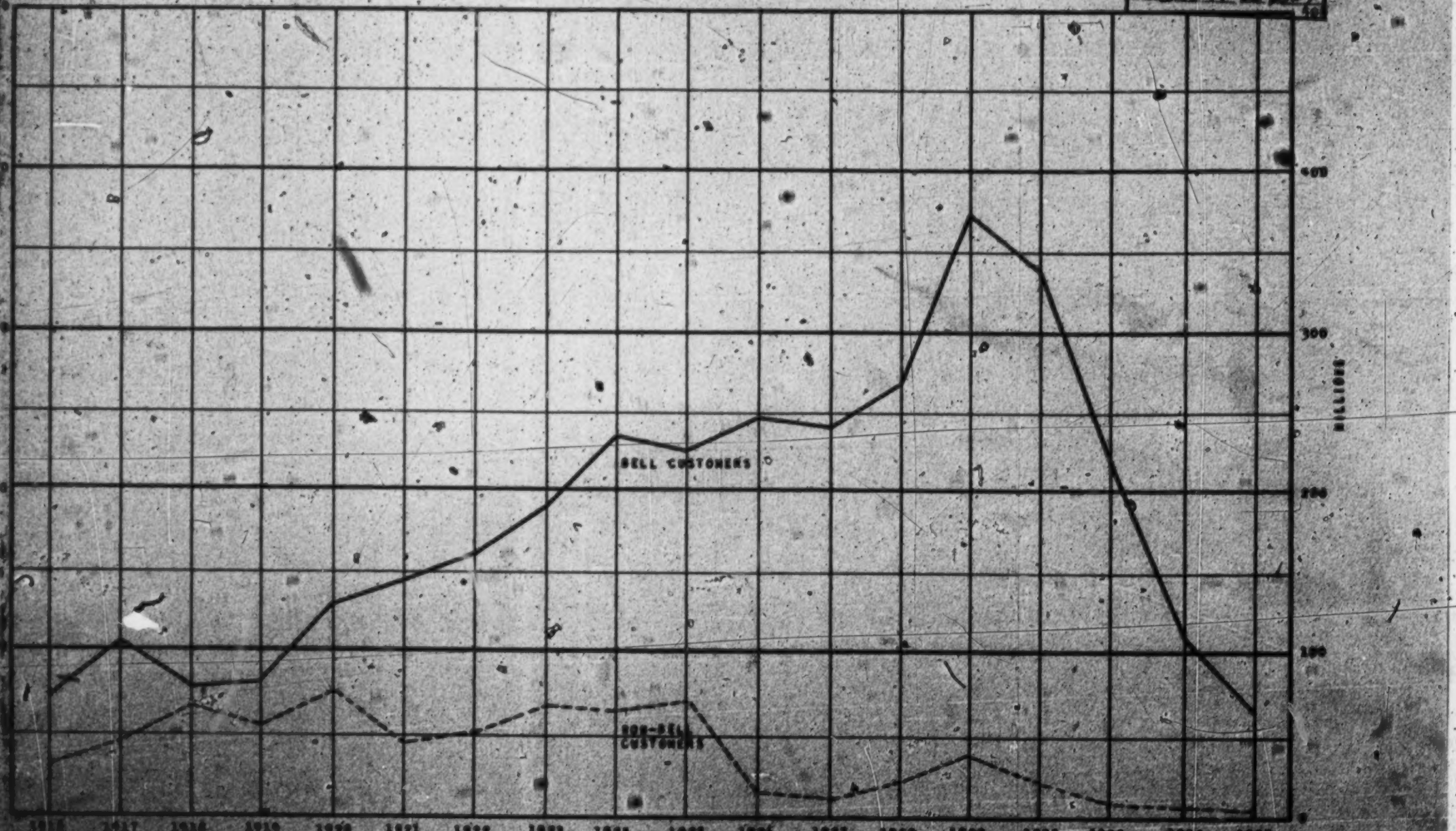
660C

C. & P. TEL. CO. OF D.C.
v. WEST et al.
U.S. DIST. CT. EQ. NO. 2340
Plaintiff's Exhibit No. 415
Witness J.K. Gerland
Date 3-30-33 Rec. 3-29-33

WESTERN ELECTRIC COMPANY, INC.

SALES TO BELL AND NON-BELL CUSTOMERS

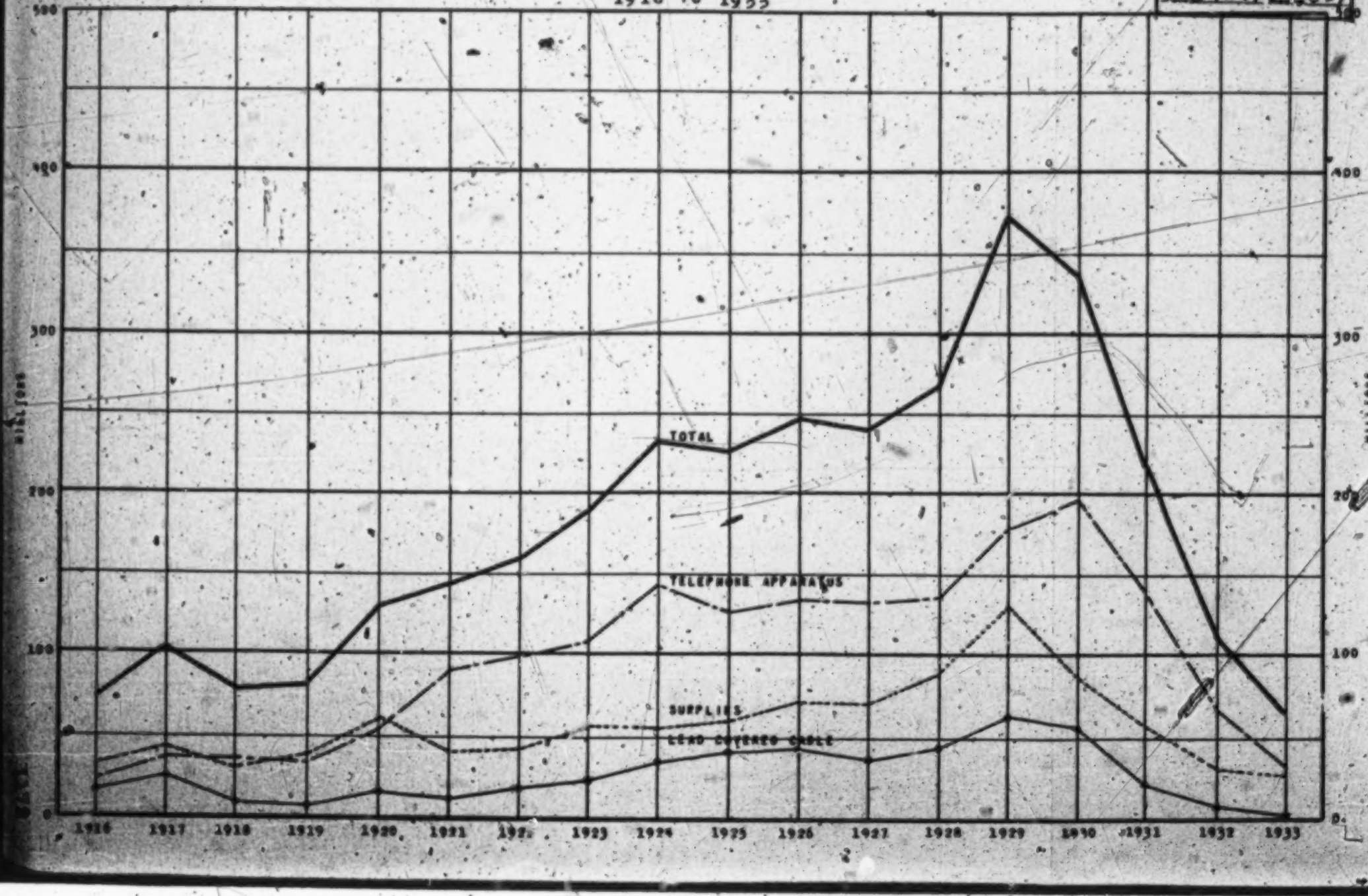
1916 TO 1933

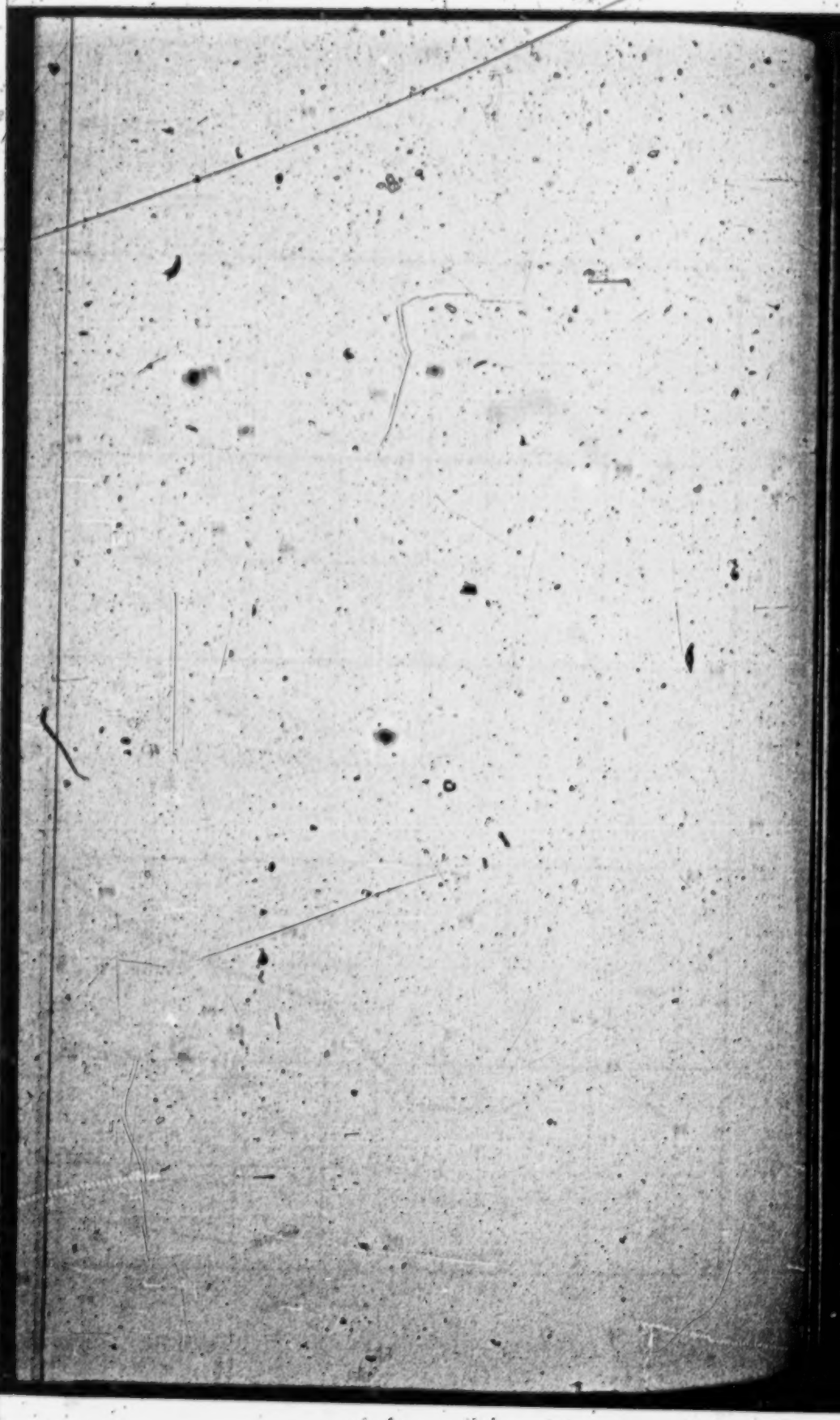


660D

C. & P. TEL. CO. OF B.C.
v. WEST et al.
U. S. DIST. CT. EQ. No. 2240
Exhibit No. A-16
Witness J. K. Crosland
Date 7-20-37 Reporter

WESTERN ELECTRIC COMPANY, INC.
SALES BY MAIN CLASSES AND IN TOTAL TO
BELL CUSTOMERS
1916 TO 1933





PLAINTIFF'S EXHIBIT A-17

C. & P. TEL. CO. of B. C. v. WEST et. al. U. S. Dist. Ct. Eq. No. 2240

Witness: J. K. Crosland

Date 3-20-34. Rec. p. 536.

Western Electric Co., Inc.

Sales, Net Profits and Average Investment, 1[illegible] 1932 Inclusive

Bell Business

(Dollars in Thousands)

	a Sales	b Total cost of sales	c Net profits (a-b)	d Per cent net profit to sales (c÷a)	e Average investment	f Per cent return on investment (c÷e)
1916	$ 73,915	$ 73,532	$ 383	.5	$46,112	.8
1917	104,682	102,297	2,385	2.3	66,184	3.6
1918	79,217	77,041	2,176	2.7	70,685	3.1
1919	80,361	77,647	2,714	3.4	69,980	3.9
1920	130,712	125,841	4,871	3.7	98,914	4.9
1922	142,885	131,922	10,963	7.7	125,330	8.7
1923	159,967	153,506	6,361	4.0	123,089	5.2
1924	188,189	181,819	6,340	3.4	131,304	4.8
1925	233,300	222,370	10,930	4.7	157,408	6.9
1926	226,700	210,367	16,333	7.2	159,942	10.2
1927	247,203	234,319	12,884	5.2	155,172	8.3
1928	241,062	224,318	16,744	6.9	160,498	10.4
1929	267,808	249,704	18,104	6.8	153,672	11.8
1930	372,384	354,385	17,999	4.8	196,801	9.1
1931	238,830	226,835	11,995	5.5	262,850	4.6
1932	219,535	208,538	10,997	5.0	262,717	4.2
	112,497	120,116	(7,619)	(6.8)	240,972	(3.0)
Total	3,219,207	3,074,647	144,560	4.5	2,490,739	5.8

36—646

691

[fol. 1174]

PLAINTIFF'S EXHIBIT A-18
C. & P. TEL. CO. OF B. C.
v.
WEST et. al.
U. S. Dist. Ct. Eq. No. 2240
Witness: J. K. Crosland
Date: 3-20-34 Rec. p. 553

Return on Investment of 88 Manufacturing Companies
(Eight Year Period 1925–1932)
(Dollars in Thousands)

		Average Investment	Average Annual Earnings
1	Air Reduction Co., Inc.	$33,472	$3,175
2	Allied Chemical & Dye Corp.	325,772	17,733
3	American Agricultural Chemical Co.	61,398	1,620
4	American Chain Co., Inc.	21,142	1,220
5	American Cyanamid Co.	39,614	1,542
6	American Ice Co.	38,788	3,170
7	American Locomotive Co.	113,106	2,484
8	American Radiator & Standard Sanitary Corp.	143,102	8,894
9	American Safety Razor Corp.	7,368	1,035
10	American Snuff Co.	13,482	1,900
11	American Steel Foundries	59,500	2,810
12	Archer-Daniels-Midland Co.	20,105	1,577
13	Atlas Powder Co.	26,621	1,240
14	Bliss, E. W., Co.	28,118	176
15	Brown Shoe Co., Inc.	19,210	1,525
16	Burroughs Adding Machine Co.	39,510	6,214
17	Case, J. I., Co.	45,244	2,138
18	Caterpillar Tractor Co.	37,791	5,537
19	Chrysler Corp.	141,744	13,775
20	Columbian Carbon Co.	33,229	2,353
21	Congoleum-Nairn, Inc.	40,029	1,514
22	Congress Cigar Co., Inc.	9,945	1,770
23	Consolidated Cigar Corp.	20,392	3,062
24	Continental Baking Corp.	68,111	6,340
25	Continental Can Co., Inc.	67,647	6,043
26	Continental Motors Corp.	32,884	431
27	Deere & Co.	84,285	6,468
28	Dennison Manufacturing Co.	16,218	700
29	Diamond Match Co.	34,547	1,614
30	DuPont, E. I., de Nemours & Co.	281,007	21,494
31	Electric Storage Battery Co.	50,377	5,134
32	Endicott Johnson Corp.	52,965	3,322
33	Eureka Vacuum Cleaner Co.	5,715	670
34	Fairbanks, Morse & Co., Inc.	39,604	1,044
35	General Baking Co.	37,726	6,270
36	General Cigar Co., Inc.	30,283	3,378
37	General Electric Co.	539,673	50,943
38	General Motors Corp.	881,307	183,346
39	General Railway Signal Co.	13,254	2,138
40	Glidden Co.	24,974	1,827

[fol. 1175]

PLAINTIFF'S EXHIBIT A-18—Continued

		Average Investment	Average Annual Earnings
41	Goodrich, B. F., Co.	139,240	4,979
42	Goodyear Tire & Rubber Co.	231,713	15,191
43	Holland Furnace Co.	12,976	951
44	Hudson Motor Car Co.	62,157	5,914
45	Hupp Motor Car Corp.	29,838	1,203
46	Ingersoll-Rand Co.	45,601	5,080
47	International Business Machines Corp.	31,909	5,716
48	International Cement Corp.	56,440	3,737
49	International Harvester Co.	355,324	21,833
50	International Shoe Co.	101,369	13,224
51	International Silver Co.	21,824	472
52	Liggett & Myers Tobacco Co.	147,464	22,101
53	Liquid Carbonic Corp.	18,272	1,278
54	Lorillard P. Co.	73,997	5,048
55	Mack Trucks, Inc.	70,672	4,177
56	Marlin-Rockwell Corp.	10,551	1,187
57	Mathieson Alkali Works, Inc.	23,448	1,613
58	Motor Wheel Corp.	15,851	1,387
59	Nash Motors Co.	53,135	14,346
60	National Cash Register Co.	57,487	4,665
61	National Lead Co.	115,283	5,253
62	National Supply Companies	55,106	2,459
63	Parke, Davis & Co.	27,178	7,090
64	Procter & Gamble Co.	116,897	16,767
65	Purity Bakeries Corp.	24,240	3,495
66	Radio Corporation of America	91,803	6,185
67	Remington Arms Co., Inc.	32,330	1,040
68	Reo Motor Car Co.	33,370	1,621
69	Reynolds, R. J., Tobacco Co.	147,641	30,998
70	St. Regis Paper Co.	52,402	2,011
71	Simmons Co.	50,064	2,012
72	Smith, A. O., Corp.	29,369	2,827
73	Spalding, A. G. & Bros.	21,448	880
74	Spicer Manufacturing Corp.	16,193	856
75	Stewart-Warner Corp.	31,820	3,252
76	Studebaker Corp.	112,647	7,415
77	Timken-Detroit Axle Co.	21,052	998
78	Timken Roller Bearing Co.	45,383	7,949
79	Torrington Co.	11,817	2,041
80	Union Carbide & Carbon Corp.	268,009	23,197
81	U. S. Gypsum Co.	59,573	5,610
82	U. S. Industrial Alcohol Co.	38,705	1,095
83	Ward Baking Corp.	38,625	3,184
84	Warren Brothers Co.	18,647	1,602
85	Westinghouse Electric & Manufacturing Co.	257,580	12,130
86	White Motor Co.	44,322	369
87	Willys-Overland Co.	79,770	573
88	Yale & Towne Manufacturing Co.	25,130	987
	Total 88 Companies	7,014,511	555,379
	Per Cent Earned on Investment 88 Companies		9.3%

[fol. 1176]

PLAINTIFF'S EXHIBIT A-19

C. & P. TEL. CO. OF B. C.

v.

WEST et. al.

U. S. Dist. Ct. Eq. No. 2240

Witness: J. K. Crosland

Date: 3-20-34. Rec. p. 559

Net Profits to Sales

38 Manufacturing Companies

(Eight-Year Period 1925–1932)

This list includes all of the manufacturing companies used in computations of earnings on investment, for which sales information is available in at least four out of the five years, 1925–1929 inclusive.

(Dollars in Thousands)

	Sales	Net Profits
Air Reduction Co., Inc.	$121,128	$26,068
American Ice Co.	153,924	22,437
Atlas Powder Co.	141,184	6,027
Brown Shoe Co., Inc.	244,925	12,200
Caterpillar Tractor Co.	238,128	44,549
Chrysler Corp.	1,691,536	95,506
Columbian Carbon Co.	73,806	16,797
Congress Cigar Co., Inc.	110,442	13,612
Electric Storage Battery Co.*	273,117	28,873
Endicott Johnson Corp.	501,519	26,534
Eureka Vacuum Cleaner Co.	68,426	5,895
Fairbanks, Morse & Co., Inc.	199,475	7,811
General Electric Co.	2,468,999	251,313
General Motors Corp.	8,280,961	1,285,396
Glidden Co.	226,849	14,331
Goodrich, B. F., & Co.	1,064,530	31,514
Goodyear Tire and Rubber Co.	1,637,651	100,679
Holland Furnace Co.	117,121	7,610
Hupp Motor Car Corp.‡	226,755	9,623
International Cement Corp.	177,208	28,410
International Shoe Co.	965,043	101,809
International Silver Co.	130,691	8,436
Liquid Carbonic Corp.*	78,774	7,041
Mack Trucks, Inc.	200,823	33,416
National Cash Register Co.	337,326	35,594
National Supply Companies	95,949	13,279
Procter and Gamble Co.	1,300,725	124,982
Purity Bakeries Corp.†	179,721	13,610
Remington Arms Co., Inc.	130,458	6,884
Reo Motor Car Co.	216,963	6,077
St. Regis Paper Co.	108,196	11,582
Simmons Co.	277,239	16,448
Spalding, A. G., & Bros.	134,948	8,089
Studebaker Corp.	905,064	37,967
U. S. Industrial Alcohol Co.†	107,087	3,501
Warren Brothers Co.	126,482	5,689
Westinghouse Electric & Manufacturing Co.	1,258,178	76,808
White Motor Co.	245,843	(816)
Total	$25,269,763	$2,560,494
Net Profits to Sales, 38 Companies		10.1%

* 1926–1932 only.
† 1925–1928 only.
‡ 1926–1929 only.
‖ 1931 omitted.

PLAINTIFF'S EXHIBIT A-20

C. & P. Tel. Co. of B. C. v. Werner et. al. U. S. Dist. Ct. Eq. No. 2240

Witness: J. K. Crosland

Date: 3-20-34. Rec. p. 565

Western Electric Co., Inc.

Estimated Effect of Price Changes, 1921–1933, on New Apparatus and Equipment Sold to Bell Companies
(Dollars in Thousands)

Year	a Sales at preceding year's Dec. 31st prices	b Effect of Price changes (annual basis)	c % Price change (annual basis) (b÷a)	d Price level at end of year	Year
December 31, 1920				100.0	
1921	$70,015	$(1,200)	(− 1.7)	98.3	1921
1922	82,010	(− 8,800	(−10.7	87.3	1922
1923	86,450	+ 200	+ 0.2	88.0	1923
1924	109,670	(− 6,100)	(− 5.6)	83.0	1924
1925	97,690	(− 1,100)	(− 1.1)	82.1	1925
1926	107,870	(− 9,400)	(− 8.7)	75.0	1926
1927	101,740	(− 5,000)	(− 4.9)	71.3	1927
1928	112,240	(−11,500)	(−10.3)	64.0	1928
1929	145,980	(−12,500)	(− 8.6)	56.8	1929
1930	140,690	+14,400	+10.2	64.4	1930
1931	108,905	+ 200	+ 0.3	64.6	1931
1932	51,420	+ 500	+ 1.0	65.2	1932
1933	25,500 (Estimated)	.....	....	65.2	1933

[fol. 1178] PLAINTIFF'S EXHIBIT A-21

C. & P. TEL. CO. OF B. C.

v.

WEST et al.

U. S. Dist. Ct. Eq. No. 2240

Witness: Cox

Date: 3-20-34. Rec. p. 682

Western Electric Company, Incorporated and —— ——

Standard Supply Contract

Dated June 2, 1930

[fol. 1179] Copy

The Chesapeake and Potomac Telephone Companies

725 Thirteenth Street, Northwest

Washington, D. C.

December 26, 1933.

Mr. Edgar S. Bloom, President, Western Electric Company, Inc., 195 Broadway, New York, N. Y.

DEAR MR. BLOOM:

The Standard Supply Contract dated June 2, 1930, made between the Western Electric Company and The Chesapeake and Potomac Telephone Company of Baltimore City, provides that certain materials returned by the Telephone Company to the Electric Company shall be designated as "Class C Materials" (Article I, Paragraph 7). Such materials are credited to the Telephone Company (and billed, when reissued) at current prices for corresponding new materials, or in certain cases, at valuations mutually agreed upon, and the Telephone Company pays interest upon the Electric Company's investment in such materials, together with a service charge of 3½ per cent of the amounts credited (Article II, Paragraph 4).

The Telephone Company desires to change the arrangements which have heretofore existed in connection with the Class C materials so that beginning December 31, 1933, it will carry its own investment in these materials.

As it appears preferable that this change be evidenced by exchange of letters rather than by rewriting the contract, an acknowledgment of this letter will be considered as effecting the change as of December 31, 1933.

Very truly yours, (Signed) L. B. Wilson, President.

[fol. 1180] December 27, 1933.

Mr. Lloyd B. Wilson, President, The Chesapeake and Potomac Tel. Co. of Baltimore City, 725 Thirteenth Street, N. W., Washington, D. C.

DEAR MR. WILSON:

Referring to your letter of December 26, 1933, to Mr. Bloom, we are agreeable to the change you propose in connection with the investment in Class "C" materials and are arranging to make it effective as of December 30, 1933.

The transfer of the investment in such materials will not involve any change in the present arrangement for the physical handling of these stocks but certain changes in the provisions of the Standard Supply Contract dated June 2, 1930, relating to our services and charges in this connection appear to be necessary as brought out in your letter.

The following are the provisions of the Contract affected, together with the proposed changes:

(1)—Article I, Paragraph 7

This paragraph provides that in connection with returned materials classified as Class "C", "* * * The Electric Company will credit the Telephone Company for, store, insure and carry the investment in such materials until reissued to the Telephone Company on its orders or otherwise disposed of with its approval * * *"

We will continue to store and insure such materials as the property of the Telephone Company, but no credits will be rendered and the Western Electric Company will not carry the investment in such materials.

[fol. 1181] (2)—Article II, Paragraph 4

The provision relating to crediting Class "C" materials when returned will be inoperative as will the clause relating

to interest on the investment due to the fact that these materials will be the property of the Telephone Company.

In lieu of the present provisions relating to the Western Electric Company service charges in connection with Class "C" materials, the Telephone Company will pay the Western Electric Company three and one-half per cent of the amount at which such materials are charged to the supply account on the Telephone Company's books.

We will continue to insure Class "C" materials for the Telephone Company on the basis outlined in the Supply Contract, and in case such materials are damaged or destroyed by fire while stored in the Electric Company's distributing storeroom will pay to the Telephone Company the amounts recovered on account of such insurance carried, less any unbilled repairs to such materials.

We understand that these changes are agreeable to your Company and will proceed to make them effective as of January 2, 1934. A letter of acceptance from you, taken with this letter, will constitute an agreement to these modifications so that it will be unnecessary to execute a new Supply Contract at this time.

Any changes in detailed operating routines which may be necessary can be worked out at a later date, between the two Companies.

Very truly yours, (Signed) C. G. Stoll, Vice President. JMW.

[fol. 1182] Copy

The Chesapeake and Potomac Telephone Cos.

725 Thirteenth Street, N. W.

Washington, D. C.

January 11, 1934.

Mr. C. G. Stoll, Vice President, Western Electric Company, Inc., 195 Broadway, New York, N. Y.

Dear Mr. Stoll:

I thank you for your letter of December 27, 1933, agreeing to the changes proposed in my letter of December 26, 1933, in connection with the investment in Class "C" ma-

terials of the Chesapeake and Potomac Telephone Company of Baltimore City, such changes being effective as of December 30, 1933.

Except as further questions may be raised, the amendments to the Standard Supply Contract dated June 2, 1930, as set out in your letter of December 27, 1933, and rendered necessary as a result of the changed arrangements above mentioned, are acceptable to us.

Yours very truly, The Chesapeake & Potomac Telephone Co. of Baltimore City, (S.) L. B. Wilson, President.

[fol. 1183] Memorandum of agreement dated June 2, 1930, between Western Electric Company, Incorporated, a corporation of the State of New York, hereinafter called the Electric Company, and ——, a corporation of the State of ——, hereinafter called the Telephone Company, witnesseth:

That in consideration of the covenants and agreements herein contained, it is agreed by and between the parties hereto as follows:

Article I

Scope

1. Manufacture and Purchase of Materials.

The Electric Company will manufacture or purchase materials which the Telephone Company may reasonably require for its business and which it may order from the Electric Company; provided, however, that nothing herein contained obligates the Telephone Company to purchase any materials from the Electric Company.

2. Delivery of Materials.

The Electric Company will deliver said materials to the Telephone Company upon its written orders, in such quantities, in such manner, and at such times as the Telephone Company may reasonably designate.

[fol. 1184] 3. Inspection of Materials.

The Electric Company, as authorized by the Telephone Company, will make technical and engineering inspections of materials not of its own manufacture furnished by it to the Telephone Company.

4. Equipment Specifications and Installations.

The Electric Company will prepare such equipment specifications and perform such installations of materials as the Telephone Company may reasonably require for its business and may order from the Electric Company.

5. Distributing Storerooms.

The Electric Company will maintain distributing storerooms as at present established or at such points as from time to time may be agreed upon, for the distribution of materials to the Telephone Company.

6. Stocks of Materials.

(a) The Electric Company will exercise due diligence in maintaining at all times, at its distributing storerooms, reasonable stocks of materials, except apparatus which must be specially assembled for each job (such as central office switchboards) and other materials which are customarily shipped direct, such as poles and directories.

"Reasonable stocks" means such quantities as the Telephone Company may reasonably require for its business, giving due consideration to variations in demand, seasonal requirements, conditions of the market and length of time required to transport materials from the sources of supply to the Electric Company's distributing storerooms.

(b) The Electric Company will carry such special stocks of materials as the Telephone Company may authorize. [fol. 1185] "Special stocks" means all stocks authorized by the Telephone Company other than or in excess of reasonable stocks.

7. Returned Materials.

The Electric Company will receive and classify any materials which the Telephone Company may return from time to time, delivered f. o. b. the Electric Company's distributing storerooms or other points designated by the Electric Company.

Such materials when received at the Electric Company's distributing storerooms shall be divided into classes: "A", "B", and "C" as defined below. Such classification shall be based on visual inspection by experienced storeroom

employees and be subject to the approval of the Telephone Company. Such visual inspection is the only inspection contemplated in the rates of remuneration specified in paragraph 4, Article II, of this Agreement. Any electrical or mechanical inspection required by the Telephone Company on materials classified "C" by visual inspection, shall be considered as part of the repair work and performed under the terms of paragraph 6 (b), Article II, of this Agreement.

Class "A"—Surplus used returned materials not presently required by the Telephone Company for its own use, for which the Electric Company has allowance prices and which can be repaired and sold by the Electric Company to other Bell System Companies shall be classified "A." The Electric Company will purchase such materials from the Telephone Company.

Class "B"—Returned materials which have no value except as junk shall be classified "B". Such materials shall, at the option of the Telephone Company, be shipped to the Electric Company's reclamation plants, or sold by the Electric Company. If advantageous for their econom-[fol. 1186] ical disposition such materials shall be dismantled by the Electric Company at its distributing storerooms.

Class "C"—All other returned materials shall be classified "C". The Electric Company will credit the Telephone Company for, store, insure and carry the investment in such materials until reissued to the Telephone Company on its orders, or otherwise disposed of with its approval.

For insurance purposes, Class "C" materials shall be valued at fifty per cent (50%) of current value new and shall be insured by the Electric Company in accordance with its current insurance practice.

8. Transportation Charges.

The Electric Company as authorized by the Telephone Company and in so far as practicable will pay for the account of the Telephone Company such of the following transportation charges as under the Electric Company's prices and terms should be borne by the Telephone Company:

(a) On shipments of materials made hereunder to the Telephone Company.

(b) On shipments of materials returned from the Telephone Company to the Electric Company's distributing storerooms or other points designated by it.

(c) On shipments of Class "B" returned materials from the Electric Company's distributing storerooms to its reclamation plants or other points of disposition designated by the Electric Company.

The Electric Company will adjust claims with carriers arising out of shipments hereunder.

[fol. 1187] 9. Repairs to Materials.

The Electric Company will maintain repair shops as at present established or at such points as from time to time may be agreed upon and will make such repairs to returned materials as the Telephone Company may reasonably require.

10. Other Services.

The Electric Company will perform such other services as the Telephone Company may reasonably require from time to time.

Article II

Prices and Terms

1. General.

The Electric Company's prices and terms shall be as low as to its most favored customers for like materials and services under comparable conditions.

2. Materials, Equipment Specifications and Installations.

The prices to be paid by the Telephone Company to the Electric Company for materials, equipment specifications and installations shall be those established from time to time by the Electric Company. Such prices in so far as practicable and any conditions affecting them not specifically provided for in this article shall be included in the Electric Company's published price lists. Prices for materials shall include inspection provided for in paragraph 8, Article I, of this Agreement.

[fol. 1188] 3. Carrying Special Stocks of Materials.

For carrying special stocks of materials the Telephone Company will pay the Electric Company monthly at the rate of eight per cent (8%) per annum on its average monthly investment in such stocks, beginning thirty (30) days after such materials have been placed in special stock.

4. Returned Materials.

Class "A" materials shall be credited to the Telephone Company at the Electric Company's allowance prices.

Class "B" materials which are shipped to the Electric Company's reclamation plants shall be credited to the Telephone Company at the Electric Company's allowance prices.

The allowance prices referred to above for Classes "A" and "B" materials shall be those established from time to time by the Electric Company. Such allowance prices in so far as practicable and any conditions affecting them not specifically provided for in this article shall be included in the Electric Company's published price lists.

Class "B" materials which are not shipped to the Electric Company's reclamation plants shall be credited to the Telephone Company at the prices realized by the Electric Company from their sale, less remuneration for its services, other than dismantling, as follows:

Seven per cent (7%) of the amounts received by the Electric Company before deduction of transportation charges, where deliveries are made to the Electric Company's distributing storerooms.

One per cent (1%) of the amounts received by the Electric Company, before deduction of transportation charges, where deliveries are made direct to a destination designated by the Electric Company, other than its distributing storerooms.

[fol. 1189] In case Class "B" materials are dismantled by Electric Company at its distributing storerooms, the Telephone Company will pay the Electric Company its costs of such dismantling, determined in accordance with paragraph 6(b) of this Article.

Class "C" materials shall be credited to the Telephone Company at the Electric Company's current prices for

corresponding new materials, except that major units of central office and multiple private branch exchange switchboards may be credited at valuations mutually agreed upon. When reissued all Class "C" materials shall be paid for by the Telephone Company at the prices at which credited.

The Telephone Company will pay the Electric Company for its services in connection with materials credited as Class "C" three and one-half per cent (3½%) of the amounts so credited and interest at a reasonable rate upon its investment in such materials; such interest to be billed monthly.

In case Class "C" materials are damaged or destroyed by fire, the Telephone Company will reimburse the Electric Company for the difference between the amounts recovered by the Electric Company on account of insurance carried and the amounts which were credited to the Telephone Company for such materials, and in addition, for any unbilled repairs to such materials.

5. Transportation Charges.

The Telephone Company will reimburse the Electric Company for transportation charges paid by it as provided for in paragraph 8, Article I, of this Agreement.

[fol. 1190] 6. Repairs to Materials.

The Telephone Company will pay the Electric Company for repairs provided for in paragraph 9, Article I, of this Agreement, as follows:

(a) At established prices which shall be agreed upon from time to time in so far as practicable and in effect on date repairs are billed to the Telephone Company.

(b) For repairs not covered by established prices, at the Electric Company's costs thereof determined as follows:

Materials: At prices prescribed in paragraph 2 of this Article.

Direct Labor: At actual cost.

Indirect Labor, Local and General Expense: At rates applied to direct labor, which rates shall be agreed upon from time to time and shall be sufficient to cover such indirect labor and expense applicable to the operation of such distributing storeroom shops.

Interest on Investment: At a reasonable rate on the Electric Company's investment required to make such repairs.

7. Other Services.

The Telephone Company will pay the Electric Company for other services as provided for in paragtaph 10, Article I, of this Agreement as follows:

(a) As established prices which shall be agreed upon from time to time in so far as practicable.

(b) For such services not covered by established prices, [fol. 1191] at the Electric Company's costs thereof determined as follows:

Materials: At prices provided for in paragraph 2 of this Article.

Direct Labor: At actual cost.

Local and General Supervision: At twenty-five per cent (25%) of direct labor.

Expense Items: At actual cost.

Interest on Investment: At a reasonable rate on the Electric Company's investment required to perform such services.

8. Payment.

As of the first of every month the Electric Company will render monthly statements of account which shall be due and payable by the Telephone Company thirty days after date of such monthly statements. If payment is deferred, the account shall thereafter bear interest at a reasonable rate.

Article III

General Provisions

1. Liability.

(a) The Electric Company shall be liable only for direct damages arising from failure to exercise reasonable care and diligence in performing its obligations hereunder.

(b) If any materials manufactured by the Electric Company shall prove to be defective or if any materials furnished by the Electric Company and inspected as provided

for in paragraph 3, Article I, of this Agreement shall prove to be not in accordance with the specifications, the Electric Company, at the option of the Telephone Company, will accept the return of such materials and allow [fol. 1192] full credit therefor or replace the same at its own expense f. o. b. destination of the original shipment to the Telephone Company.

(c) In case the Telephone Company shall decide to abandon or reduce the use of or purchase from others any materials not of Electric Company manufacture or materials of Electric Company manufacture not standardized by the American Telephone and Telegraph Company, theretofore customarily purchased from the Electric Company, it will give the Electric Company reasonable notice of such intention and will reimburse the Electric Company for any loss on account of any reasonable stocks thereof on hand and any reasonable commitments made by the Electric Company prior to the receipt of such notice in anticipation of the Telephone Company's orders.

2. Cancellation of Prior Agreement.

This Agreement as of the date it becomes effective supersedes the Agreement between the parties hereto dated January 1, 1924, entitled "Standard Supply Contract" and all Agreements supplementary thereto.

3. Term of Agreement.

This Agreement shall become effective on the second day of June 1930, and shall continue in force until terminated by mutual consent or by one year's notice in writing from either party to the other, or by the termination of the license from the American Telephone and Telegraph Company to the Telephone Company or to the Electric Company.

[fol. 1193] In witness whereof, the parties hereto have caused this Agreement to be executed by their respective officers thereunto duly authorized and their corporate seals to be hereunto affixed the day and year first above written.

Western Electric Company, Incorporated, by ——, President.

Attest: ——, Secretary.

——, by ——, President.

Attest: ——, Secretary.

[fol. 1194]

PLAINTIFF'S EXHIBIT #23

C. & P. TEL. CO. OF B. C. v. WEST et al. U. S. Dist. Ct. Eq. No. 2240

Witness: Cox

Date: 3-20-34. Rec. p. 702

Western Electric Company, Incorporated, Sales of Telephone Apparatus and Lead Covered Cable to Graybar Electric Company, Incorporated—1925–1933 Inclusive

Year	Telephone apparatus*	Lead covered cable	Total
1925†.....	$5,719,204	$2,448,952	$8,168,156
1926.....	6,240,274	3,427,418	9,667,692
1927.....	4,887,117	2,274,619	6,661,736
1928.....	4,428,774	2,580,693	7,009,467
1929.....	4,996,716	2,989,587	7,986,303
1930.....	3,922,216	2,965,256	6,887,472
1931.....	2,824,649	1,476,680	4,301,329
1932.....	2,205,320	408,586	2,613,906
1933.....	1,829,961	433,073	2,263,034

* Includes installation.

† Sales to Supply Department of Western Electric Company, predecessor of Graybar Electric Company, in 1925.

No. 832. February 5, 1934.

PLAINTIFF'S EXHIBIT A-23
C. & P. TEL. CO. OF B. C. v. WEST et al. U. S. Dist. Ct. Eq. No. 2240
Witness: Cox
Date: 3-20-34. Rec. p. 713

Telephone Apparatus—Based on Western Electric Shipments or Output

Comparison of Western Electric Company, Inc., Prices to Bell Telephone Companies under Standard Supply Contract with Lowest Advertised Prices in General Trade on Comparable Apparatus

	1925	1926	1927	1928	1929	1930	1931	1932
Lowest Price in General Trade								
% General Trade of W. E.	120.86%	123.92%	128.27%	138.98%	147.80%	144.07%	180.15%	127.70%
*Graybar Electric Company, Inc.								
% Graybar of W. E.	156.23%	157.35%	138.27%	151.15%	153.44%	150.02%	140.64%	141.25%
Kellogg Switchboard and Supply Co.								
% Kellogg of W. E.	133.21%	138.98%	141.91%	163.45%	180.63%	173.79%	160.89%	153.14%
Stromberg-Carlson Telephone Mfg. Co.								
% Stromberg-Carlson of W. E.	139.83%	133.89%	135.85%	157.70%	169.66%	167.63%	153.80%	151.04%
American Electric Company								
% American of W. E.	.....	.....	.....	127.87%	143.69%	173.83%	125.23%	118.70%
Automatic Electric Company								
% Automatic of W. E.	.....	.....	.....	Included above under Amer. Co.		146.22%	132.46%	135.32%
Cook Electric Company								
% Cook of W. E.	138.92%	128.65%	143.06%	136.57%	136.91%	153.06%	117.91%	112.83%
Reliable Electric Company								
% Reliable of W. E.	105.06%	108.93%	115.33%	134.97%	159.68%	159.16%	127.69%	115.71%

Note.—In obtaining the above ratios, for each item included:

The price used was the average for the year indicated weighted by time in effect.
Prior to 1931 the quantity used was an average of the Western Electric output for the year indicated and the two preceding years.
For 1931 the quantity used was the Western Electric output for the year.
For 1932 the quantity used was the Western Electric shipments or output for the year.
The lowest priced item among the suppliers other than the Western Electric Company, Inc., was selected as Lowest Price in General Trade.
In 1928 and 1929 the American and Automatic Companies were treated as one company and the results are shown under American Electric Company. In 1928 the American prices are as of July 1, 1928.

* Western Electric Company to General Trade prior to January 1, 1926.

No. 816-A. December 27, 1933.

[fol. 1196] (2)

Telephone Apparatus—Based on Western Electric Shipments or Output—1932

Comparison of Western Electric Company, Inc., Prices to Bell Telephone Companies under Standard Supply Contract with Lowest Advertised Prices in General Trade on Comparable Apparatus

This study covers coded telephone apparatus manufactured by the Western Electric Company and used primarily in the telephone business. It does not include panel, step-by-step, manual or toll assemblies, piece parts, reconditioned apparatus, radio and special commercial products and such apparatus as loading coils and repeaters which are restricted and have no equivalents in the General Trade.

8,028 items manufactured by the Western Electric Company, Inc., were studied and, for each of these items, commercial equivalents, if any, were designated from the lines of the following suppliers of telephone apparatus in the General Trade:

Graybar Electric Company, Inc.
Kellogg Switchboard and Supply Company.
Stromberg-Carlson Telephone Manufacturing Company.
American Electric Company.
Automatic Electric Company.
Cook Electric Company.
Reliable Electric Company.

For all items for which there were equivalents, the Western Electric prices were compared with the prices of General Trade suppliers except where the item was not priced throughout the year, where the Graybar equivalent was the only equivalent found, where the sales value of the class was insignificant, where the value of the class in the study was less than $100, where the total amount studied of the comparable items was less than 10% of the total sales value of the same class, and where the majority of the sales of the class having been compared the inclusion of minor items would not change the ratios for the class but would tend to overweight the class in the study.

Prices used were the averages for the year 1932 weighted by the time in effect. These prices were weighted by the

Western Electric shipments or output for the year 1932. The 2,917 items specifically compared represented 58% of the Western Electric Company's sales of the same classes which in turn represented 88% of the sales of all classes within the scope of the study.

The study compares by classes the total price of each supplier with the comparable Western Electric price to the Bell Telephone Companies and shows for each class the General Trade supplier's price expressed as a per cent of the Western Electric price. It gives also by classes a similar comparison for the lowest priced item in the General Trade.

A summary of the classes shows that the lowest price of suppliers in the General Trade for apparatus sold loose in the year 1932 averaged 28% higher than the Western Electric price to the Bell Telephone Companies under the Standard Supply Contract.

The pricing methods of the Western Electric Company and the General Trade suppliers differ in the following respects:

(a) The Stromberg and Kellogg Companies use special unpublished prices for switchboard apparatus sold in assemblies that are lower than prices for apparatus sold loose. An adjustment for such pricing is applicable to the pricing of these Companies for items of their own manufacture sold in assemblies but not for apparatus sold unassembled, hand sets, desk stands and other substation apparatus.

(b) The Western Electric Company does not give quantity discounts, whereas companies in the General Trade give them on some classes of material. Maximum published discounts are used in this study.

(c) The Western Electric Company charges for equipment specifications when engineering a job. Suppliers in the General Trade, except Graybar, usually make no additional charge for engineering and so it is assumed that this expense is in the price of the apparatus.

(d) Western Electric prices are f. o. b. thirty-two distributing houses or destination. Similarly, Graybar prices are f. o. b. its distributing houses or destination. Prices on Kellogg manufacturers are f. o. b. Chicago and in some cases two branch houses. Prices on Stromberg-Carlson

manufacturers are f. o. b. Rochester and in some cases two branch houses. The other General Trade prices used in this study are f. o. b. factory.

These differences in pricing may properly be applied to the pricing for the individual General Trade Companies and would result in some minor adjustments of their ratios. Differences (b) and (d), which raise the ratios, are applicable also to the lowest price in the General Trade as selected from all the companies considered. However, differences (a) and (c), which lower the ratios, are not applicable to the lowest price in the General Trade because they relate to assemblies of a manufacturer's own products and not to a group of items selected from different companies because they are the lowest in price regardless of the fact that, in general, they are not designed for such assembly and would not so function.

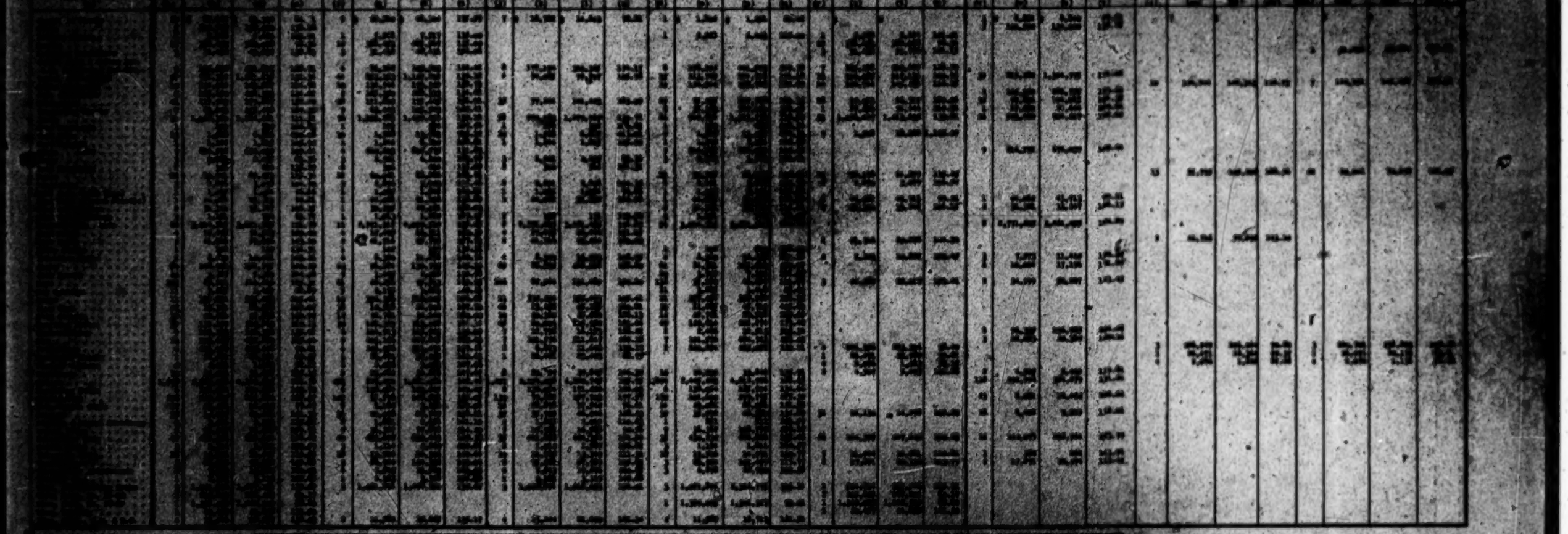
E. V. Cox, Assistant Vice President.

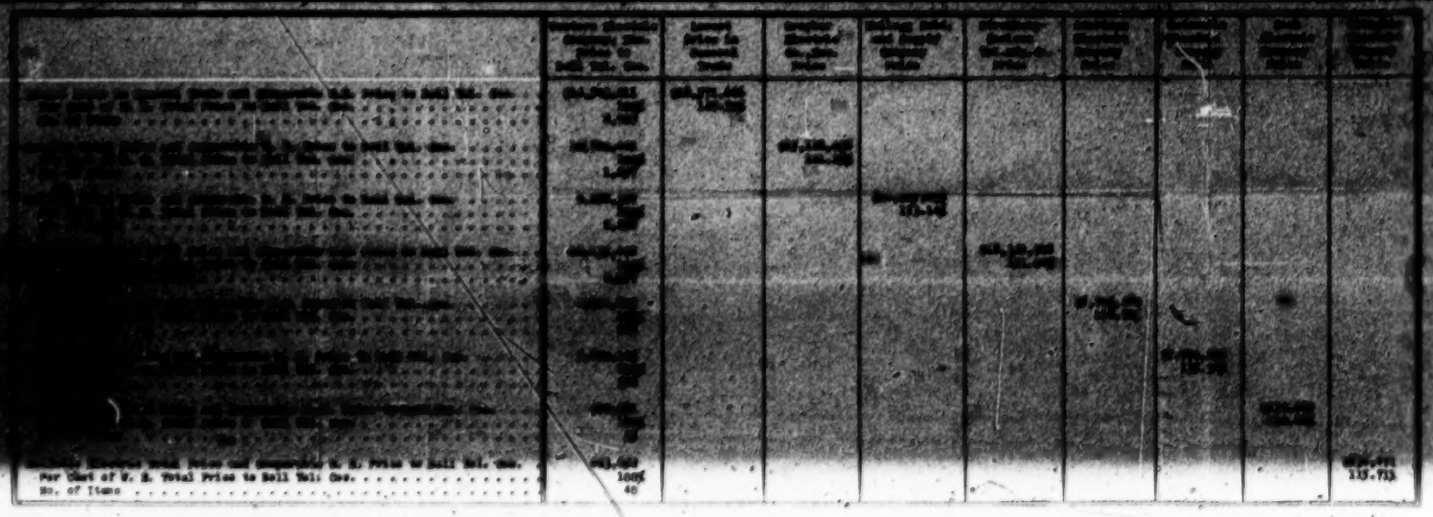
No. 806—Sheet 1.
October 23, 1933.

(Here follow photolithographs of side folios 1197, 1198 and 1199)

PLAINTIFF'S EXHIBIT A-23—Continued

(Page 3)





PLAINTIFF'S EXHIBIT A-23—Continued

(Page 4)

[redacted]

[redacted]

[redacted]

[redacted]

Element (a)	No. of Items (b)	Revision 1933 Action: Lowest Price in General Trade and Comparable U.S. Price to Bell Tel. Cos. — Lowest in General Trade: U.S. to Bell Tel. Cos. Amount (c)	Lowest in General Trade: Amount (d)	Lowest in General Trade: % of U.S. to Bell Tel. Cos. (e)	Application of Revision 1933 Action to 1932 Study to Arrive at Revision 1933 Study Point: No. of Items in 1932 General Study No. 846 (f)	U.S. Price to Bell Tel. Cos. in 1932 Gen. Study No. 846 (g)	Lowest Price in Gen. Trade (Col. [illegible] weighted by Col. (a)) (h)
Banks	2	$ 30,818	$ 181,446	138.89	2	$ 130,792	$ 130,792
Bridges	6	134,382	305,112	97.28	12	308,483	297,887
Bridging Connectors	1	14,364	24,157	140.85	3	17,438	24,558
Cable, A. & C. Int. L.C. for Exch. & Int. Constr.	5	184,853	211,815	114.69	9	193,136	221,514
Cable, Outside	15	776,857	1,137,423	146.56	37	931,337	1,364,948
Cable Terminals	4	100,64[illegible]	120,051	119.29	10	124,394	148,464
Coin Collectors	1	154,830	274,449	177.97	2	146,150	260,044
Condensers	4	73,133	121,194	165.69	41	137,963	228,686
Connecting Blocks	1	27,460	47,006	170.80	9	63,843	109,173
Cords	23	970,326	1,284,584	132.37	91	1,241,380	1,177,841
Dials	2	606,748	668,277	110.14	9	624,591	687,714
Fuses	1	51,420	59,261	114.74	22	60,041	68,893
Hand Sets (Phone) Plastic	1	44,048	45,331	102.33	1	44,048	45,329
Hand Set Handles	1	30,735	31,879	103.28	2	31,301	32,318
Hand Telephone Sets	8	2,955,448	3,732,989	126.31	24	3,314,715	3,867,867
Head Cells	1	41,499	59,498	143.37	2	41,714	59,818
Jacks	14	87,478	126,446	144.54	80	108,913	157,453
Keys	14	69,342	96,430	139.70	153	84,111	117,511
Lamps	4	347,198	435,896	125.67	11	137,234	172,328
Mounting Plates	4	37,866	181,443	186.12	39	111,109	344,884
Number Plates	1	84,108	118,908	138.10	9	109,113	150,712
Plugs	3	185,904	415,971	224.77	10	203,649	457,738
Protectors	3	280,410	199,777	70.56	4	284,954	202,331
Protector Blocks	1	24,471	18,695	76.42	1	24,471	18,696
Relays	77	1,149,833	2,193,182	190.76	1,715	2,545,058	4,852,592
Repeating Coils	1	117,341	151,448	129.08	4	118,854	198,131
Ventilators	16	97,639	111,732	114.45	218	134,647	213,693
Retardation Coils	2	19,306	13,844	71.72	17	23,251	14,699
Signal Plugs	1	14,038	48,166	343.15	9	26,347	83,048
Subscriber Sets	5	380,417	575,483	151.24	42	434,364	674,341
Transmitters	1	49,853	75,427	109.43	3	84,324	94,347
Wire, Distributing Frame	3	1,87[illegible],894	1,390,368	130.43	3	1,071,894	1,396,284
Wire, Drop, No. 14-1C Paired	1	209,809	179,582	85.59	1	209,809	179,576
Wire, Drop, No. 19-8P	1	1,379,075	1,852,443	89.51	1	1,379,075	1,232,470
Wire, Leading	1	20,457	25,162	163 00	1	20,457	25,162
Total	167	$12,054,321	$15,374,[illegible]94		2,782	$14,3[illegible],410	$19,539,384
Ratio of Lowest General Trade to Western Electric Price to Bell Telephone Companies				127.41			136.39

Notes: In securing Revision 1933 ratios for each item the price used was an average for 1932 weighted by time in effect. The quantity used was the Western Electric shipments or output [illegible].

Total Western Electric to Bell Telephone Companies in 1932 Study $14,543,811.
Col. (c) above is 82.8% of 1932 Study.
Col. (g) above is 98.51% of 1932 Study.

Ex. 847
March 12, 1934.

1198

1289

PLAINTIFF'S EXHIBIT A-23—Continued

(Page 5)

[redacted]

[redacted]

Comparison of Western Electric Company, Inc., prices to Bell Telephone companies under Standard Supply Contract with Lowest Advertised Prices in General Trade on Commodity Schedules

Prices as of date indicated are weighted by the Western Electric shipments or output for 1938.

Classification (a)	No. of Items (b)	January 1, 1934			April 1, 1934			July 1, 1934			October 1, 1934		
		W.E. Amount (c)	Lowest in Gen. Trade Amount (d)	Lowest in Gen. Trade Per Cent of W.E. (e)	W.E. Amount (f)	Lowest in Gen. Trade Amount (g)	Lowest in Gen. Trade Per Cent of W.E. (h)	W.E. Amount (i)	Lowest in Gen. Trade Amount (j)	Lowest in Gen. Trade Per Cent of W.E. (k)	W.E. Amount (l)	Lowest in Gen. Trade Amount (m)	Lowest in Gen. Trade Per Cent of W.E. (n)
Battery Racks (I)	1	$ 5,548	$ 6,255	112.70									
Booths (I)	3	289,130	222,667	96.83									
Bridging Connectors (I)	1	19,443	31,601	160.72									
Cable, Rubber Ins., L.C. (I)	1	18,383	21,340	116.09									
Cable, Silk & Cot. Ins. L.C. for Brnh. & Int. Constr. (I)	3	147,149	153,312	104.24									
Cable, Switchboard (I)	9	639,284	847,520	132.57									
Cable Terminals (I)	2	105,854	128,657	122.47									
Coin Collectors (I)	1	154,830	277,262	180.37									
Condensers (I)	6	73,211	123,511	168.71									
Connecting Blocks (I)	2	49,755	75,648	151.47									
Cords (I)	6	737,993	771,133	104.49									
Dials (I)	1	498,172	549,392	110.28									
Dynos (I)	1	51,650	59,496	115.15									
Hand Telephone Sets (I)	2	1,458,291	1,794,612	123.06									
Head Cords (I)	1	47,498	59,398	125.05									
Induction Coils (I)	1	7,703	12,838	166.66									
Jacks (I)	13	92,605	117,038	126.38									
Keys (I) & (T)	11	68,619	91,197	132.90									
Lamps (T)	1	292,727	234,183	80.00									
Lamp Caps (T)	6	5,736	12,270	206.78									
Lamp Sockets (T)	4	22,340	23,437	105.71									
Mounting Plates (T)	5	125,290	211,134	168.57									
Plugs (I)	1	104,696	247,344	236.25									
Projectors (I)	1	225,417	209,414	92.90									
Protector Blocks (I)	1	26,472	19,655	74.25									
Receivers (I)	1	14,936	22,844	152.95									
Relays (T)	32	1,485,221	2,352,149	158.37									
Repeating Coils (T)	1	128,697	151,408	117.65									
Resistances (T)	14	40,599	138,417	340.87									
Retardation Coils (T)	5	21,511	14,699	71.47									
Ringers (I)	2	10,401	14,718	141.79									
Subscriber Sets (I)	3	257,499	538,777	150.37									
Telephone Sets (I)	1	4,063	6,448	116.44									
Transformers (I)	1	34,689	37,491	98.61									
Wire, Distributing Frame (I)	1	580,431	648,329	111.80									
Wire, Drop (I)	2	1,468,685	1,502,989	93.41									
Wire, Inside (I)	1	238,147	167,938	117.35									
Wire, Lashing (I)	1	22,360	26,661	117.59									
Wire, Subs., B.& S. (I)	2	12,260	14,436	117.96									
Total	151	$ 9,827,640	$12,096,877	122.89									

* For each item studied, the lowest priced item among the suppliers was selected.
(I) Weighted by Western Electric Shipments.
(T) Weighted by Western Electric Output.

[redacted]
February 2, 1938

[fol. 1200] PLAINTIFF'S EXHIBIT A-24

C. & P. TEL. CO. OF B. C.

v.

WEST et al.

U. S. Dist. Ct. Eq. No. 2240

Witness: Cox

Date: ——. Rec. p. —

Step-by-Step Equipment—Based on Western Electric Shipments

Comparison of Western Electric Company, Inc., Prices to Bell Telephone Companies under Standard Supply Contract with Prices of Automatic Electric Company to General Trade on Identical Equipment

Year	Per cent Automatic Electric of W. E. price including engineering
1929	136.53
1930	138.78
1931	129.72
1932	125.49
1933 Tentative	138.33

No. 834. February 8, 1934.

[fol. 1201] (2)

Step-by-Step Equipment—Based on Western Electric Shipments

1932

This study compares Western Electric prices to the Bell Telephone Companies under the Standard Supply Contract on step-by-step equipment with the prices of the Automatic Electric Company in the General Trade on identical equipment.

It includes all items of Western Electric step-by-step equipment for which there were corresponding Automatic

Electric items. It does not include step-by-step apparatus sold as such and not assembled into equipment. The prices for both companies were averages for the year 1932 weighted by time in effect. The quantities used were the shipments to the Bell Telephone Companies during 1932 of step-by-step equipment of Western Electric manufacture and of Automatic Electric manufacture.

It shows by classes the total Western Electric price to the Bell Telephone Companies, the total Automatic Electric price in the General Trade and the Automatic Electric price expressed as a per cent of the Western Electric price.

The Automatic Electric Company provides for engineering in its prices and the Western Electric Company makes a special charge for engineering for each installation. The cost of engineering by the Western Electric Company has been estimated at 8.1% and added to the Western Electric price to obtain for each class the per cent that the Automatic Electric price is of the Western Electric price including engineering.

The results are summarized below:

Classification	Total W. E. price to Bell Tel. Cos.	Total Auto. Elec. price	Per cent of W. E. price	Per cent of W. E. price incl. eng.
(a)	(b)	(c)	(d)	(e)
Bank Supports	$9,350	$17,056	182.42	168.75
Connectors and Connector Shelves	1,154,306	1,617,818	140.16	129.65
Frames	48,647	59,566	122.45	113.27
Line Finders and Line Finder Units	680,656	900,127	132.24	122.33
Multiple Banks	82,555	117,444	142.26	131.60
Repeaters and Repeater Shelves	56,284	78,319	137.44	127.14
Selectors and Selector Shelves	1,340,537	1,738,132	129.66	119.94
Subscriber Line Equipment	365,486	543,444	148.69	137.55
Test Distributors and Test Distributor Shelves	14,332	18,985	132.47	122.54
Total	$3,752,853	$5,090,891	135.65	125.49

E. V. Cox, Assistant Vice President.

No. 807-A: February 13, 1934.

[fol. 1202] (3)

Step-by-Step Equipment—Based on Western Electric Shipments

1933 Tentative

This study compares Western Electric prices to the Bell Telephone Companies under the Standard Supply Contract on step-by-step equipment with the prices of the Automatic Electric Company in the General Trade on identical equipment. It shows by classes the total Western Electric price including equipment specifications to the Bell Telephone Companies, the total Automatic Electric price in the General Trade and the Automatic Electric price expressed as a per cent of the Western Electric price.

Complete information about shipments to the Bell Telephone Companies of step-by-step equipment for the year 1933 is not yet available. Therefore, in securing these tentative percentages, the important 1932 items were selected for study. The Western Electric and Automatic Electric prices used were the average prices weighted by time in effect during 1933. The quantities used were shipments to the Bell Telephone Companies during 1932 of step-by-step equipment of Western Electric manufacture and of Automatic Electric manufacture.

The results are summarized below:

Classification	Total W. E. price to Bell Tel. Cos.	Total Auto. Elec. price	Per cent of W. E. price
(a)	(b)	(c)	(d)
Connectors and Connector Shelves	$1,227,483	$1,904,489	143.47
Line Finders and Line Finder Units	783,784	1,048,801	134.00
Selectors and Selector Shelves	1,541,618	2,041,638	132.43
Subscriber Line Equipment	420,309	637,966	151.78
Total	$4,072,133	$5,632,974	138.33

E. V. Cox, Assistant Vice President.

No. 835. February 8, 1934.

[fol. 1203] PLAINTIFF'S EXHIBIT A-25

C. & P. TEL. CO. OF B. C.

v.

WEST et al.

U. S. Dist. Ct. Eq. No. 2240

Witness: Cox

Date: ——. Rec. p. —

Paper Insulated Lead Covered Cable—Based on Actual Sales to Non-Bell Customers

Comparison of Actual Prices Charged to Non-Bell Customers for Paper Insulated Lead Covered Cable with Western Electric Company, Incorporated, Prices to Bell Telephone Companies under Standard Supply Contract for Similar Cable

Year	Per cent actual cost of Western Electric price
1925	121.74
1926	121.68
1927	122.00
1928	120.95
1929	119.45
1930	115.99
1931	111.21
1932	98.09

[fol. 1204] (2)

Paper Insulated Lead Covered Cable—Based on Actual Sales to Non-Bell Customers—1932

Comparison of Actual Cost to Non-Bell Customers of Paper Insulated Lead Covered Cable with Western Electric Company, Incorporated, Prices to Bell Telephone Companies under Standard Supply Contract for Similar or Identical Cable

This study covers sales to non-Bell customers of paper insulated lead covered cable during 1932. Information on these sales was received from three sources:

(a) The factories of the Western Electric Company, Incorporated, which reported all shipments on order of the Graybar Electric Company, Incorporated, and the distributing houses of the Graybar Electric Company which reported the resale price on all cable billed in 1932.

(b) The Associated Companies which reported purchases of cable by Connecting Companies from cable suppliers other than Graybar wherever it was possible to secure this information.

(c) The Distributor Department of the Western Electric Company which reported cable sales where the Graybar Electric Company bid and lost an order and where the successful competitor's price was available in sources open to the public.

Western Electric prices to Bell Telephone Companies are as of the date of shipment. Under (a) above prices are for cable identical to that actually purchased, under (b) and (c) above prices are for similar cable. Items reported by Connecting Companies for which there were no similar cables manufactured by the Western Electric Company were eliminated from the study.

Since the comparison is based on prices at the factories, freight wherever included was deducted from the actual cost to non-Bell customers.

The following table summarizes the results of the study:

	Actual cost f. o. b. factory	W. E. price f. o. b. factory	Per cent actual cost of W. E. price
Non-Quadded Cable	$484,653	$484,523	100.03
Quadded Cable	158,167	162,572	97.29
Tape Armored Cable	19,110	22,077	86.56
Submarine Cable	17,356	23,320	74.43
Total	$679,286	$692,492	98.09

E. V. Cox, Assistant Vice President.

No. 812. October 13, 1933.

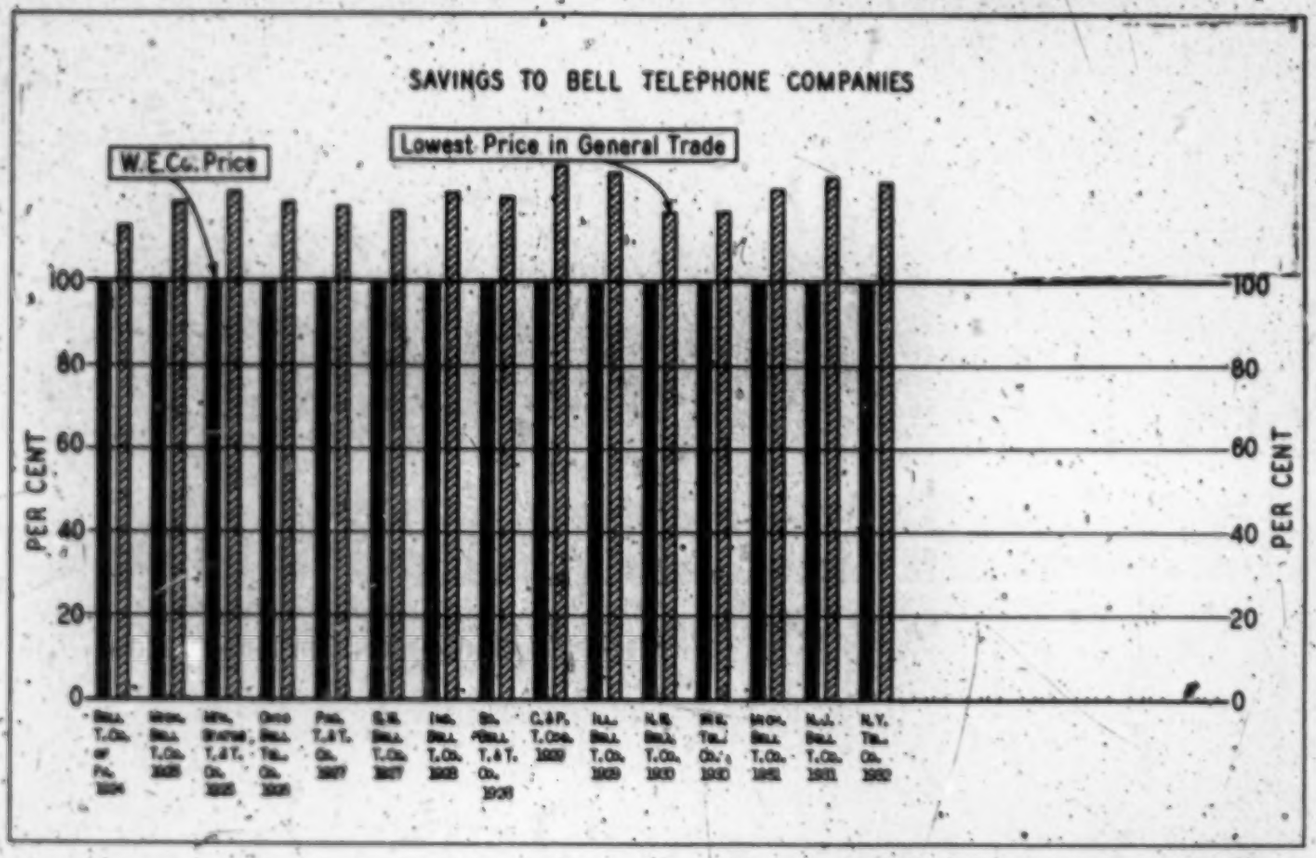
(Here follows photolithograph of side folio 1205)

C. & P. TEL. CO. OF D.C. v. WEST et. al. U.S. DIST. CT. EQ. No. 2240
Plaintiff's Exhibit A26
Witness Cox
Date ..... Rec. p.

(1)

BELL TELEPHONE COMPANIES

COMPARISON OF ACTUAL PRICES PAID THE WESTERN ELECTRIC COMPANY, INC., UNDER STANDARD SUPPLY CONTRACT FOR APPARATUS AND EQUIPMENT AND LEAD COVERED CABLE WITH LOWEST PRICES IN GENERAL TRADE ON SAME CLASSES OF MATERIAL



SAVINGS TO BELL TELEPHONE COMPANIES				
YEAR	COMPANY	W.E. PRICE UNDER STANDARD SUPPLY CONTRACT	LOWEST PRICE IN GENERAL TRADE	PER CENT SAVING
1924	BELL TEL. CO. OF PENNSYLVANIA	19,216,578	21,724,119	13.05
1925	MICHIGAN BELL TEL. CO.	8,449,017	10,094,651	19.46
1925	MTN. STATES TEL. & TEL. CO.	1,610,519	1,951,154	21.15
1926	OHIO BELL TEL. CO.	6,308,206	7,466,261	18.38
1927	PACIFIC TEL. & TEL. CO.	11,566,299	13,596,730	17.55
1927	SOUTHWESTERN BELL TEL. CO.	12,754,669	14,874,641	16.62
1928	INDIANA BELL TEL. CO.	1,271,060	1,538,425	21.03
1928	SO. BELL TEL. & TEL. CO.	10,545,157	12,663,439	20.09
1929	C. & P. TEL. COS.	4,296,545	5,486,874	27.68
1929	ILLINOIS BELL TEL. CO.	13,538,600	17,060,416	26.01
1930	NORTHWESTERN BELL TEL. CO.	4,900,598	5,700,734	16.33
1930	WISCONSIN TELEPHONE CO.	4,557,006	5,283,115	16.44
1931	MICHIGAN BELL TEL. CO.	4,712,266	5,746,644	21.95
1931	NEW JERSEY BELL TEL. CO.	7,584,901	9,426,179	24.77
1932	NEW YORK TELEPHONE CO.	10,717,229	13,281,357	23.93

NOTE: PANEL EQUIPMENT NOT INCLUDED. PRIOR TO 1929 STEP-BY-STEP EQUIPMENT NOT INCLUDED.

No. 814
DECEMBER 1, 1933.

V689

[fol. 1206] (2)

Study of Cost of Telephone Apparatus and Lead Covered Cable

The Chesapeake and Potomac Telephone Companies—1929

Outline of Study

This study covers purchases made by The Chesapeake and Potomac Telephone Companies from the Western Electric Company, Inc., under the Standard Supply Contract during 1929. It includes the total shipments of Western Electric material to The Chesapeake and Potomac Telephone Companies excluding panel equipment and radio and other material not used primarily in the telephone business and it also includes billing for installation and equipment specifications on switchboards. It amounts to $4,296,545 of which $3,202,966 is for telephone apparatus and $1,093,579 for paper insulated lead covered cable including freight.

It shows that these purchases, if made from manufacturers in the General Trade, would have cost The Chesapeake and Potomac Telephone Companies at least $5,485,874 which is $1,189,329 or 27.68% more than the actual cost from the Western Electric Company, Inc., under the Standard Supply Contract.

Telephone Apparatus

The manufacturers in the General Trade whose prices were used for comparison are the Kellogg Switchboard and Supply Company, the American Electric Company, Inc., the Automatic Electric Inc., the Cook Electric Company, and the Reliable Electric Company, all of Chicago, Ill., and the Stromberg-Carlson Telephone Manufacturing Company of Rochester, N. Y.

Purchases of manual and toll central office equipment including switchboard wires and cables which were compared with similar apparatus manufactured by firms in the General Trade amount to $662,302 which is 15% of the total purchases studied. The lowest price at which this could have been purchased in the General Trade is $1,134,073 which is $471,771 or 71.23% more than the actual cost.

Purchases of step-by-step equipment which were compared with identical equipment manufactured by the Automatic Electric Inc. amount to $25,298 which is 1% of the total purchases studied. The lowest price at which this

could have been purchased in the General Trade is $36,232 which is $10,934 or 43.22% more than the actual cost.

Purchases of substation apparatus including all cords which were compared with similar apparatus manufactured by firms in the General Trade amount to $976,934 which is 23% of the total purchases studied. The lowest price at which this could have been purchased in the General Trade is $1,377,418 which is $400,484 or 40.99% more than the actual cost.

Purchases of outside plant apparatus and protection equipment which were compared with similar apparatus manufactured by firms in the General Trade amount to $156,238 which is 4% of the total purchases studied. The lowest price at which this could have been purchased in the General Trade is $192,055 which is $35,817 or 22.92% more than the actual cost.

The total purchases of telephone apparatus which were compared with similar apparatus manufactured by firms in the General Trade amount to $1,820,772 which is 43% of the total purchases studied. The lowest price at which this could have been purchased in the General Trade is $2,739,778 which is $919,006 or 50.47% more than the actual cost.

Purchases on which no comparisons were made and on which is was assumed that the price in the General Trade would have been the same as the actual cost amount to $1,313,697 which is 30% of the total purchases studied. This assumption is fair for the study shows that on items on which accurate comparisons could be made, the price in the General Trade would have been 50.47% higher.

The Western Electric Company, Inc., furnished equipment specifications at a cost of $68,497 or 2% of the total purchases studied. Since manufacturers in the General Trade usually make no additional charge for engineering but include it in the price of the apparatus, no entry for this was made under the General Trade price although at times such expense must be assumed by the purchaser.

Western Electric prices on direct shipments include freight and on stock shipments are f. o. b. Washington, D. C. For convenience it was assumed that the delivery point for all shipments was Washington. The freight from the nearest f. o. b. points of the General Trade manufacturers to Washington was estimated at $18,064 and added to the General Trade price.

Summarizing we find that the price of similar apparatus,

if purchased at the lowest price of manufacturers in the General Trade, would have been at least $4,071,539 which is $868,573 or 27.12% more than the actual cost of these purchases from the Western Electric Company, Inc., under the Standard Supply Contract.

Paper Insulated Lead Covered Cable

Lead covered cable purchases amount to $1,061,183 which is 25% of the total purchases studied. These prices are f. o. b. the Hawthorne, Ill., and Kearny, N. J., factories of the Western Electric Company, Inc. The estimated lowest price in the General Trade for similar cable f. o. b. factory is $1,268,114 which is $206,931 or 19.50% more than the actual cost. The actual freight paid is $32,396 which was added to the Western Electric price and the freight from the nearest f. o. b. point in the General Trade to Washington was estimated at $18,297 and added to the General Trade price.

Summarizing we find that the price of cable, if purchased from manufacturers in the General Trade, would have been at least $1,286,411 which is $192,832 or 17.63% more than the actual cost.

Supply Expense

If The Chesapeake and Potomac Telephone Companies had purchased their material direct from concerns other than the Western Electric Company, Inc., they would have had to incur supply expense for purchasing, storing, etc., which they did not incur on purchases from the Western Electric Company, Inc. This expense was estimated at 3% of the total purchases or $127,924 and this amount was added to the lowest price of manufacturers in the General Trade.

Summary

Summarizing we find that the price of similar material, if purchased at the lowest prices of manufacturers in the General Trade would have been at least $5,485,874 which is $1,189,329 or 27.68% more than the actual cost of these purchases from the Western Electric Company, Inc.

E. V. Cox, Assistant Vice President.

No. 621—Sheet 1-A.
February 20, 1931.

(8)

The Chesapeake and Potomac Telephone Companies—1929

Actual Price Paid Western Electric Company, Incorporated, Under Standard Supply Contract

Versus

Lowest Price of Manufacturers in General Trade on Same Classes of Material

(a)	Per cent of Total Purchases (b)	W. E. Price (c)	Lowest price in General Trade (d)	Saving under supply contract Amount (e)	Saving under supply contract Per cent (f)
Telephone Apparatus—					
Classifications Compared					
Manual and Toll Central Office Equipment including Switchboard Wires and Cables	15	$662,302	$1,134,073	$471,771	71.23
Step-by-Step Equipment	1	25,298	36,232	10,934	43.22
Substation Apparatus including all Cords	23	976,934	1,377,418	400,484	40.99
Outside Plant Apparatus and Protection Equipment	4	156,288	192,055	35,817	22.92
Total Compared	43	$1,820,772	$2,739,778	$919,006	50.47
Classifications Not Compared*	30	$1,313,697	$1,313,697	.....	.....
Equipment Specifications	2	68,497	.....	*68,497	.....
Freight	..	.....	18,064	18,064	.....
Total	..	$3,202,966	$4,071,539	$868,573	27.12
Paper Insulated Lead Covered Cable	25	$1,061,183	$1,268,114	$206,931	19.50
Freight	..	32,396	18,297	*14,099	.....
Total	..	$1,093,579	$1,286,411	$192,832	17.63
Supply Expense	...	.....	$127,924	$127,924	.....
Grand Total	...	$4,296,545	$5,485,874	$1,189,329	27.68

*Classifications Not Compared—		
Central Office Equipment:		
Framework, Assembly and Wiring—Desks, Mounting Units and Switchboards	$56,210	
Cabinets and Casings	6,000	
Frames	12,684	
Racks	13,004	
Cable Turning Sections and Panels	1,619	
Factory Cabling	22,461	
Fuse Boards, Fuse and Lamp Panels	11,928	
Telephone Power Equipment	59,427	
Ticket Distributing Systems—All Types	626	
Installation	238,518	
Miscellaneous	25,889	
		$460,369
Private Branch Exchange Switchboards;		
Standard Assemblies (not including Apparatus under Compared and Not Compared) and Framework, Assembly and Wiring		140,007
Piece Parts		86,136
Reconditioned Apparatus		57,566
No Similar Apparatus Manufactured in General Trade:		
Amplifiers—Types 23 and 27, Carrier Current Equipment, Loading Coils, Repeater Equipment, Transmission Testing Apparatus		161,833
Other Coded Telephone Apparatus:		
Backboards	$5,317	
Cable, Switchboard	151,198	
Coin Collectors	52,465	
Coin Receptacles, Covers and Rails	35,172	
Connecting Blocks	4,673	
Locks	3,609	
Message Registers	51,997	
Protector Mountings	21,446	
Test Sets	21,861	
Tools	8,900	
Wire, Switchboard, Braided Black Enameled	8,482	
Other	27,763	
		$392,783
Miscellaneous Telephone Apparatus		15,094
Grand Total		$1,313,007

* Indicates that price under Standard Supply Contract is higher.

[fol. 1208] (4)

New York Telephone Company—1932

Comparison of Actual Prices Paid the Western Electric Company, Inc., under Standard Supply Contract for Apparatus and Equipment and Lead Covered Cable With Lowest Prices in General Trade on Same Classes of Material

Outline of Study

This study covers purchases made by the New York Telephone Company from the Western Electric Company, Inc., under the Standard Supply Contract during 1932. It amounts to $10,717,229 of which $9,814,519 is for apparatus and equipment and $902,710 for paper insulated lead covered cable including freight. Of these purchases, 64% were found comparable. The study includes the total shipments of Western Electric material direct to the New York Telephone Company and to the New York and Brooklyn distributing houses of the Western Electric Company except that panel equipment and radio and material not used primarily in the telephone business were excluded. It includes, also, billing for installation and equipment specifications on switchboards. The Western Electric shipments to the distributing houses include some material finally shipped to other Bell System companies. No attempt was made to eliminate these as they amounted to less than 1% of the total study.

It shows that these purchases, if made from suppliers in the General Trade, would have cost the New York Telephone Company at least $13,281,357 which is $2,564,128 or 23.93% more than the actual cost from the Western Electric Company, Inc., under the Standard Supply Contract.

Apparatus and Equipment

The suppliers in the General Trade whose prices were used for comparison are the Kellogg Switchboard and Supply Company, the American Electric Company, the Automatic Electric Company, the Cook Electric Company and the Reliable Electric Company, all of Chicago, Ill., the Stromberg-Carlson Telephone Manufacturing Company of Rochester, N. Y., and the Graybar Electric Company, Inc., of New York, N. Y.

Purchases of manual and toll central office apparatus which were compared with similar apparatus sold by firms in the General Trade amount to $2,572,945 which is 24% of the total purchases studied. The lowest price at which this could have been purchased in the General Trade is $4,039,354 which is $1,466,409 or 56.99% more than the actual cost.

Purchases of step-by-step equipment which were compared with identical equipment manufactured by the Automatic Electric Company amount to $199,645 which is 2% of the total purchases studied. The lowest price at which this could have been purchased in the General Trade is $270,669 which is $71,024 or 35.58% more than the actual cost.

Purchases of substation apparatus including all cords which were compared with similar apparatus sold by firms in the General Trade amount to $1,675,973 which is 15% of the total purchases studied. The lowest price at which this could have been purchased in the General Trade is $2,052,408 which is $376,435 or 22.46% more than the actual cost.

Purchases of telephone booths which were compared with similar booths sold by firms in the General Trade amount to $270,175 which is 3% of the total purchases studied. The lowest price at which these could have been purchased in the General Trade is $265,744 which is $4,431 or 1.64% less than the actual cost.

Purchases of outside plant and protection apparatus which were compared with similar apparatus sold by firms in the General Trade amount to $191,820 which is 2% of the total purchases studied. The lowest price at which this could have been purchased in the General Trade is $208,447 which is $16,627 or 8.67% more than the actual cost.

Purchases of wires and cables which were compared with similar material sold by firms in the General Trade amount to $1,094,241 which is 10% of the total purchases studied. The lowest price at which these could have been purchased in the General Trade is $1,372,699 which is $278,458 or 25.45% more than the actual cost.

The total purchases of apparatus and equipment which were compared with similar apparatus sold by firms in the General Trade amount to $6,004,799 which is 56% of the total purchases studied. The lowest price at which this could have been purchased in the General Trade is $8,209,321 which is $2,204,522 or 36.71% more than the actual cost.

Purchases on which no comparisons were made and on which it was assumed that the price in the General Trade

would have been the same as the actual cost amount to $3,702,856 which is 35% of the total purchases studied. This assumption is fair for the study shows that on items on which accurate comparisons could be made, the price in the General Trade would have been 36.71% higher.

The Western Electric Company, Inc., furnished equipment specifications at a cost of $106,864 or 1% of the total purchases studied. Since suppliers in the General Trade, with the exception of the Graybar Electric Company, Inc., usually make no additional charge for engineering but include it in the price of the apparatus, no entry for this was made under the General Trade price although at times such expense must be assumed by the purchaser.

Western Electric prices on direct shipments include freight and on stock shipments are f. o. b. New York. For convenience, it was assumed that the delivery point for all shipments was New York. The freight from the nearest f. o. b. points of the suppliers in the General Trade was estimated, where freight would be charged by the supplier, at $60,808 and added to the General Trade price, except that no freight was estimated for Stromberg-Carlson apparatus sold f. o. b. its Rochester, N. Y., factory.

Summarizing, we find that the price of similar apparatus and equipment, if purchased at the lowest price of supplies in the General Trade, would have been at least $11,972,985 which is $2,158,466 or 21.99% more than the actual cost of these purchases from the Western Electric Company, Inc., under the Standard Supply Contract.

Paper Insulated Lead Covered Cable

Lead covered cable purchases amount to $890,117 which is 8% of the total purchases studied. These prices are f. o. b. the factories of the Western Electric Company, Inc. The estimated lowest price in the General Trade for similar cable f. o. b. factory is $979,058 which is $88,941 or 9.99% more than the actual cost. The actual freight paid is $12,593 which was added to the Western Electric price and the freight to New York from the nearest factories of the General Trade was estimated at $8,175 and added to the General Trade price.

Summarizing, we find that the price of cable, if purchased from suppliers in the General Trade, would have been at least $987,233 which is $84,523 or 9.36% more than the actual cost.

Supply Expense

If the New York Telephone Company had purchased its material direct from concerns other than the Western Electric Company, Inc., it would have had to incur supply expense for purchasing, storing, etc., which it did not incur on purchases from the Western Electric Company, Inc. This expense was estimated at 3% of the total purchases or $321,139 and this amount was added to the lowest price of suppliers in the General Trade.

Summary

Summarizing, we find that the price of similar material, if purchased at the lowest prices of suppliers in the General Trade, would have been at least $13,281,357 which is $2,564,-128 or 23.93% more than the actual cost of these purchases from the Western Electric Company, Inc.

E. V. Cox, Assistant Vice President.

No. 808—Sheet 1.
November 20, 1933.

New York Telephone Company—1932

Comparison of Actual Prices Paid the Western Electric Company, Inc., under Standard Supply Contract for Apparatus and Equipment and Lead Covered Cable with Lowest Prices in General Trade on Same Classes of Material

(a)	Per cent of total purchases (b)	W. E. price (c)	Lowest price in general trade (d)	Saving under supply contract Amount (e)	Saving under supply contract Per cent (f)
Apparatus and Equipment—					
Classifications Compared:					
Manual and Toll Central Office Apparatus	24	$2,572,945	$4,039,354	$1,466,409	56.99
Step-by-Step Equipment	2	199,645	270,669	71,024	35.58
Substation Apparatus including all Cords	15	1,675,973	2,052,408	376,435	22.46
Telephone Booths	3	270,175	265,744	†4,431	†1.64
Outside Plant and Protection Apparatus	2	191,820	208,447	16,627	8.67
Wires and Cables	10	1,094,241	1,372,699	278,458	25.45
Total Compared	56	6,004,799	8,209,321	2,204,522	36.71
Classifications Not Compared*	35	3,702,856	3,702,856		
Equipment Specifications	1	106,864		†106,864	
Freight	..	.....	60,808	60,808	
Total Apparatus and Equipment	..	9,814,519	11,972,985	2,158,466	21.99
Paper Insulated Lead Covered Cable	8	890,117	979,058	88,941	9.99
Freight	..	12,593	8,175	†4,418	
Total Lead Covered Cable	..	902,710	987,233	84,523	9.36
Supply Expense	..	.....	321,139	321,139	
Grand Total	..	$10,717,229	$13,281,357	$2,564,128	23.93

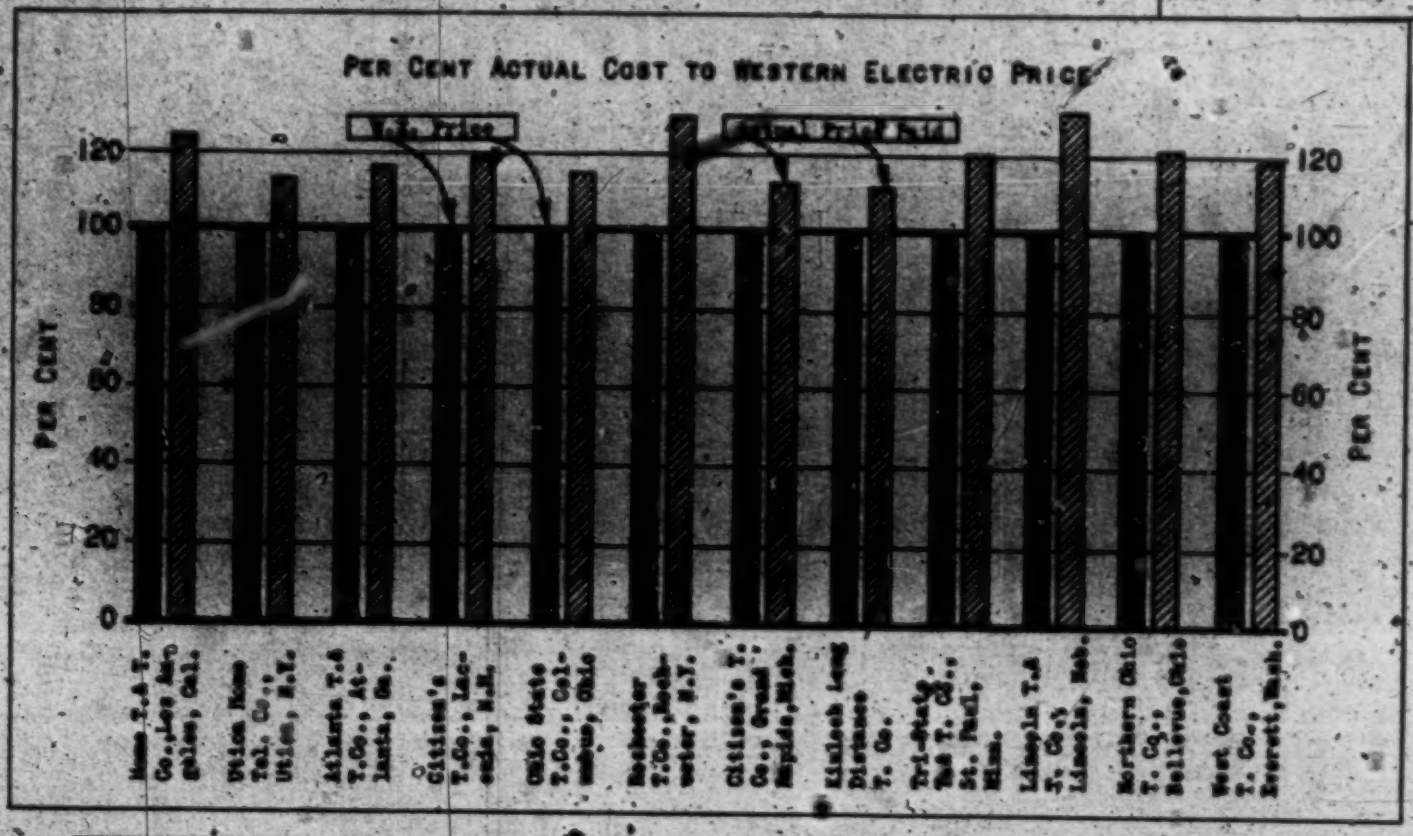
* Classifications Not Compared—		
Central Office Equipment:		
Framework, Assembly and Wiring—Cabinets and Casings, Desks, Frames, Mounting Units, Switchboards, Test and Control Boards and Miscellaneous	$344,635	
Cabinets and Casings	36,877	
Frames	28,340	
Racks	49,065	
Panels, Key, Lamp, Jack and Fuse; Fuse and Apparatus Mounting Boards	88,323	
Factory Cabling	80,521	
Telegraph Equipment	11,836	
Telephone Power Equipment	173,662	
Installation	093,003	
Miscellaneous	91,591	
		$1,897,896
Private Branch Exchange Switchboards:		
Standard Assemblies and Framework, Assembly and Wiring (not including Apparatus under Compared and Not Compared)		111,074
Piece Parts		225,020
Reconditioned Apparatus		535,775
Coded Apparatus:		
Amplifiers—Types 23 and 27, Carrier Current Equipment, Loading Coils, Repeater Equipment, Transmission Testing Apparatus, Transmission Test Boards and Picture Transmission Equipment	$146,823	
Backboards	64,613	
Cable, Inside Wiring	26,171	
Coin Collector Parts (Gray)	95,032	
Gauges, Tools and Burnishers	33,319	
Locks	18,155	
Message Registers, Bases and Sockets	347,899	
Protector Mountings	28,324	
Terminal Strips	73,504	
Wire, Drop, No. 17-BR	25,864	
Wire, Inside	74,744	
Other	150,963	
		1,088,041
Miscellaneous Telephone Apparatus		45,050
Grand Total		$3,703,856

† Indicates that price under Standard Supply Contract is higher.

(Here follows photolithograph of side folio 1210)

C. & P. TEL. CO. OF B.C.
v. WEST et. al.
U.S. DIST. CT. EQ. NO. 2240
Plaintiff's Exhibit A 27
Witness Cox
Date 3-30-37 Rec'd 748

COMPARISON BETWEEN ACTUAL COST OF TELEPHONE MATERIAL TO INDEPENDENT TELEPHONE COMPANIES AND WESTERN ELECTRIC PRICES FOR SIMILAR MATERIAL UNDER THE STANDARD SUPPLY CONTRACT



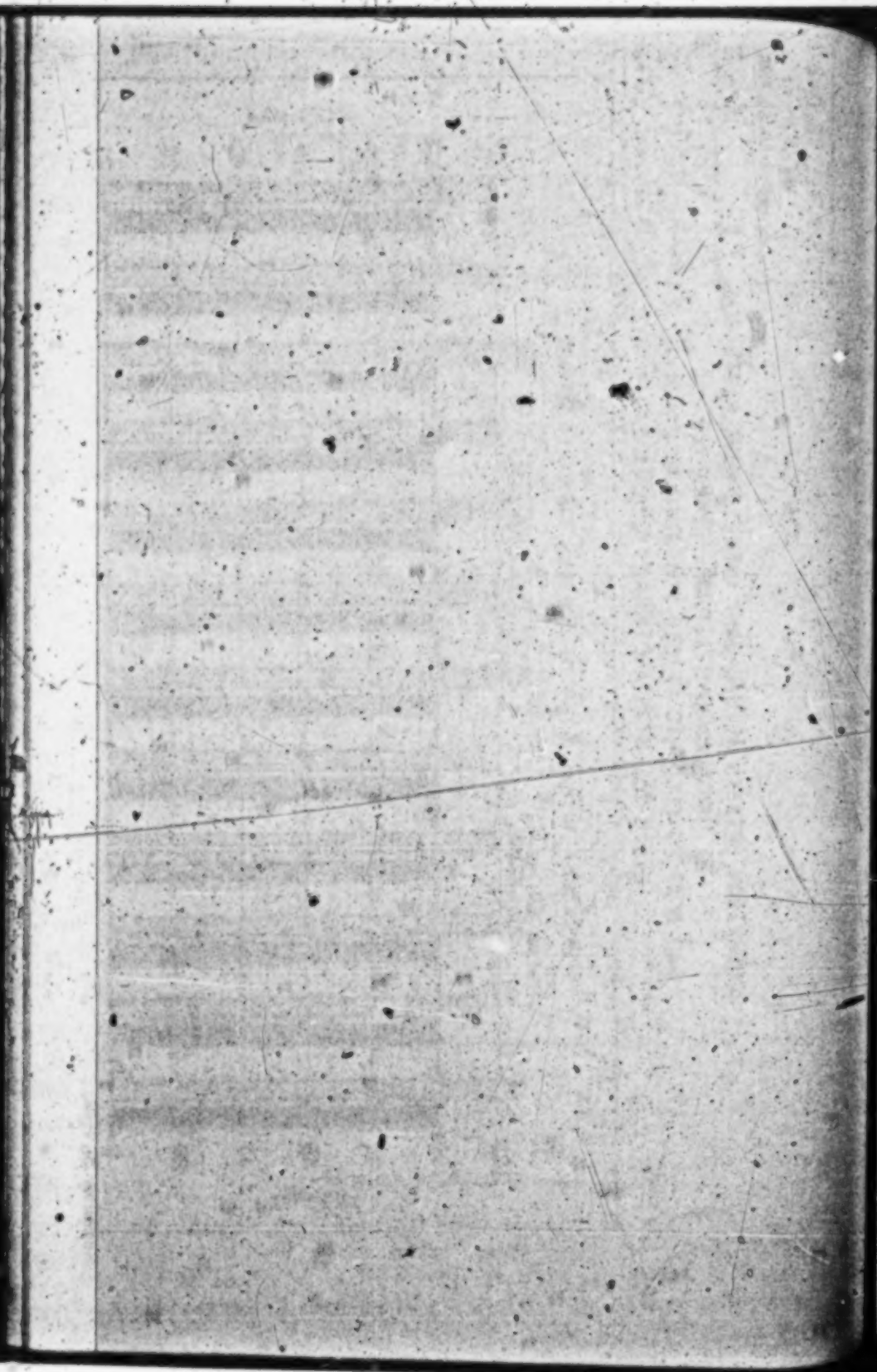
ACTUAL COST AND WESTERN ELECTRIC PRICE

YEAR	COMPANY	ACTUAL COST	W. E. PRICE UNDER STANDARD SUPPLY CONTRACT	PER CENT ACTUAL COST HIGHER THAN W. E.
1904-15	Home Tel. and Tel. Co., Los Angeles, Calif.	$703,838	$565,934	24.37
1906-12	Union Home Tel. Co., Utica, N.Y.	43,731	38,666	13.10
1905-18	Atlanta Tel. and Tel. Co., Atlanta, Ga.	67,825	58,301	16.34
1906-19	Citizen's Tel. Co., Lacrosse, Ind.	15,691	13,258	18.35
1919-20	Ohio State Tel. Co., Columbus, Ohio	570,220	496,780	14.79
1920	Rochester Tel. Co., Rochester, N.Y.	79,804	61,242	29.98
1920-22	Citizen's Tel. Co., Grand Rapids, Mich.	238,950	211,068	12.26
1920-22	Kinloch Long Distance Tel. Co., St. Louis, Mo.	264,048	226,957	11.93
1923	Tri-State Tel. and Tel. Co., St. Paul, Minn.	638,884	529,237	20.18
1923	Lincoln Tel. and Tel. Co., Lincoln, Neb.	187,743	142,262	31.97
1923	Northern Ohio Tel. Co., Bellevue, Ohio	39,626	32,833	21.81
1923-1931	West Coast Tel. Co., Everett, Wash.	425,810	358,816	18.77

No. 578

February 25, 1932.

1210



[fol. 1211] (2)

Study of the Cost of Telephone Material

West Coast Telephone Company, Everett, Washington, 1929, 1930 and First Four Months of 1931

Outline of Study

This study compares the cost to the West Coast Telephone Company of telephone material purchased in the open market during 1929, 1930 and the first four months of 1931 with the prices it would have paid had it had a Standard Supply Contract with the Western Electric Company, Incorporated. It includes all apparatus and equipment, lead covered cable and telephone supplies purchased. The information for the study was taken directly from the invoices of the Company on file in its purchasing department and spot checked to the paid invoices on file in the auditing department. The total of these purchases recorded, including freight, amounted to $425,810 of which 87% were found comparable. The study shows that these purchases if made from the Western Electric Company, Inc., under the Standard Supply Contract would have cost the West Coast Company $358,516 which is $67,294 less than the actual cost. In other words, the price in the open market was 18.77% more than the price under the Standard Supply Contract on similar material.

Transportation charges as disclosed by the invoices and purchase order tickets were treated as part of the cost of the item shipped except that these charges were disregarded where the f. o. b. point was within the states of Washington or Oregon. The Western Electric prices under the Standard Supply Contract are f. o. b. Seattle which point was selected for convenience as the delivery point on all Western Electric shipments or f. o. b. the supply point if it was within the states of Washington or Oregon. In cases where it is customary for the Western Electric to bill transportation charges these were estimated from standard weights and the hauls involved.

The items of Western Electric manufacture were designated without knowledge of the prices paid and under the general plan that unless the Western Electric article was as good as or better than the actual purchase no comparison would be made. On items of non-western Electric man-

ufacture American Telephone and Telegraph Company specification articles of similar nature and function were designated. If there was no specification item a commercial item used by the Bell System was selected.

The Western Electric prices under the Standard Supply Contract were taken as of the date of shipment from published price lists where available. In the few cases where there were no published prices on Western Electric material, actual billing or quotations to Bell Telephone Companies were used. On non-Western Electric material, prior to October 1, 1930, the prices were determined from the Western Electric contracts with suppliers and the remuneration rates provided for in the Standard Supply Contract and subsequent to October 1, 1930 the Western Electric established prices to the Bell Telephone Companies were used.

On the following sheets are shown a brief history of the West Coast Company at the time the study was made and statement showing the detail underlying the results given above.

E. V. Cox, Assistant Vice President.

No. 660—Sheet 1.
February 1, 1932.

(3)

[fol. 1212] General Description

West Coast Telephone Company, Everett, Washington

1. Approximate Territory Served

The West Coast Telephone Company operates in the western part of the state of Washington, in the western, northeastern and south central parts of Oregon and in the northwestern part of California.

2. Brief History

The West Coast Telephone Company was incorporated in 1928 to consolidate nine telephone companies in Washington and Oregon. It subsequently bought several smaller companies including one in California. The Pacific Telephone and Telegraph Company had a financial interest in several of the companies and received a 25% interest in

the common stock of the West Coast Telephone Company. This stock was later exchanged for 25% of the common stock of the West Coast Utilities Corporation, a holding company for the stock of the West Coast Telephone Company.

In December 1930 control of the West Coast Telephone Company was purchased by Consolidated Development Company, San Francisco, which is associated with the Byllesby Interests,

3. Conditions as of December 31, 1930, as Reported to Interstate Commerce Commission

Total Assets	$8,866,118
Outstandir Securities—	
Bonds	$3,880,000
Preferred Stock	1,500,000
Common Stock	2,000,000
Total	$7,380,000
Surplus	$1,036,385
Gross Earnings, Year 1930—	
Operating	$1,487,290
Non-operating	14,235
Total	$1,501,525
Number of Stations—	
Company	33,945
Service	2,648
Total	36,593

West Coast Telephone Company, Everett, Washington

Comparison of Actual Cost of Telephone Material with Western Electric Company, Incorporated, Prices under Standard Supply Contract on Similar Material 1929, 1930 and First Four Months of 1931

Classification (a)	Per cent of total purchases (b)	Actual cost (c)	W. E. price under standard supply contract (d)	Actual cost higher by: Amount (e)	Actual cost higher by: Per cent (f)
Apparatus and Equipment—					
Items Compared:					
Central Office Equipment and Substation Apparatus	22	$91,406	$63,135	$28,271	44.78
Manual Central Office Switchboards	1	4,041	3,139	902	28.74
Step-by-Step Central Offices	8	35,610	25,205	10,405	41.28
Private Branch Exchange Switchboards	1	5,517	4,138	1,379	31.73
Step-by-Step Apparatus	..	690	411	279	67.88
Outside Plant Apparatus and Protection Equipment	6	23,962	14,706	9,257	62.96
Total Compared	..	$161,226	$110,783	$50,443	45.53
Items Not Compared	5	$21,944	$21,944	.....	.....
Total Apparatus and Equipment	..	$183,170	$132,727	$50,443	38.01
Paper Insulated Lead Covered Cable	14	$59,178	$49,673	$9,505	19.14
Telephone Supplies—					
Central Office and Substation:					
Items Compared	4	$18,921	$16,196	$2,725	16.90
Items Not Compared	1	3,194	3,194	.....	.....
Total	..	$22,115	$19,390	$2,725	14.11

Outside Plant:					
Items Compared	31	$122,080	$127,473	$4,611	3.62
Items Not Compared	7	29,258	29,258	.....	.....
Total	..	$151,247	$156,736	$4,611	2.94
Total Telephone Supplies	..	$153,462	$176,116	$7,346	4.17
Grand Total	..	$425,610	$358,516	$67,394	15.77

No. 660—Sheet 8. February 1, 1932.

[fol. 1298]

PLAINTIFF'S EXHIBIT A-28

C. & P. TEL. CO. OF B. C. v. WEST et al. U. S. Dist. Ct. Eq. No. 2240
Witness: Cox
Date 5-20-34. Rec. p. 749

Supplies Not of Western Electric Company Manufacture

Washington, D. C., December 31, 1933

Comparison of Western Electric Company, Incorporated, Prices to Bell Telephone Companies under Standard Supply Contract on Specification Material with Prices in General Trade on Corresponding Material of Commercial Grade

Item (a)	Unit of price (b)	Prices f.o.b. Washington, Western Electric Company, Inc. (c)	Graybar Electric Company, Inc. (d)	American Electric Company (e)
Anchors, Expanding, Everstick, 4 way, 6"	Ea.	$1.94	$1.18	$1.18
Anchors, Expanding, Everstick, 4 way, 8"	"	1.67	2.08	1.84
Bolts, Carriage, ⅜" x 4", Galv., Spec. 6261	C Pcs.	1.25	1.80	1.80
Bolts, Crossarm, ⅝" x 10", Galv., Spec. 6309	" "	5.06	7.81	7.82
Bolts, Crossarm, ⅝" x 14", Galv., Spec. 6309	" "	6.60	9.66	9.66
Bolts, Machine, ½" x 4½", Galv., Spec. 6207	" "	2.70	3.67	3.66
Braces, Crossarm, 1-7/32" x 7/32", 30", Galv., Spec. 3529	" "	7.06	10.08	10.08
Clamps, Guy, 3 Bolt, 6", Smooth Heavy, Spec. 6090	" "	19.06	25.20	25.20

PLAINTIFF'S EXHIBIT A-28—Continued

Item (a)	Unit of price (b)	Prices f.o.b. Washington: Western Electric Company, Inc. (c)	Graybar Electric Company, Inc. (d)	American Electric Company (e)
Conduit, Clay, 4 way, 3¼", sq. bore, 36" length, Spec. 4700	C Duct Ft.	7.14	8.00	.....
Conduit, Pine, Southern, Creosoted, 3", Prelim. Spec. 6-20-32	C Linear Ft.	10.40	10.50	.....
Crossarms, Pine, Yellow, Creosoted, Type A, Uneq., 10', 10 Pin, Spec. 6012	C Pcs.	85.00	91.50	101.55
Insulators, Glass, Double Petticoat, Spec. 4116	M Pcs.	50.50	67.40	64.08
Knobs, Porcelain, Type C, Spec. 4323	" "	9.40	17.12	17.00
Knobs, Porcelain, Type S, Spec. 4306	" "	11.00	14.63	15.85
Pins, Insulator, Locust, ¼" x 8", Spec. 6128	" "	22.00	24.40	12.91
Poles, Pine, Southern, Creosoted, Class 3—30', Spec. 6412	Ea.	8.93	11.03	.....
Poles, Pine, Southern, Creosoted, Class 4—35', Spec. 6412	"	10.15	12.96	.....
Poles, Pine, Southern, Creosoted, Class 5—30', Spec. 6412	"	6.69	8.33	.....
Poles, Pine, Southern, Creosoted, Class 6—25', Spec. 6412	"	4.32	5.30	.....
Poles, Pine, Southern, Creosoted, Class 7—25', Spec. 6412	"	3.49	4.39	.....
Poles, Pine, Southern, Creosoted, Class 9—20', Spec. 6412	"	2.17	2.79	.....
Rings, Bridle, Type C, 1¼", Galv., Spec. 4110	M Pcs.	14.60	17.72	17.02
Rings, Bridle, Type E, ⅝", Galv., Spec. 4110	" "	6.50	8.00	7.87
Rods, Ground, Type B, ½" x 8', with wire, Spec. 6037	C Pcs.	18.80	29.35	29.35
Rods, Guy, Thimble, ⅝" x 8', Spec. 6459	" "	49.00	.....	52.18
Screws, Drive, ½" x 4½", Spec. 6281	" "	2.25	3.00	3.00
Sleeves, Copper, .045, 17 B & S, Half Length, Spec. 6030	M Pcs.	8.00	12.92	12.94
Sleeves, Copper, .104, 12 NBS, Full Length, Spec. 6030	" "	17.10	22.37	22.43
Sleeving, Lead, Spec. 6046	Cwt.	7.75	.....	8.08
Solder, Bar, 40/60, Spec. 4301	"	29.25	.....	29.46
Steps, Pole, Spike Head, ⅝" x 10", Galv., Spec. 6140	C Pcs.	5.25	7.52	7.53
Strand, 5/16", 6,000 Lb., Galv., Spec. 6179	M Ft.	10.30	13.37	13.31
Strand, ¾", 10,000 Lb., Galv., Spec. 6179	" "	14.75	23.47	23.35

Tape, Friction, Black, ¾" x ½ Lb. roll, Spec. 6326	C Lbs.	18.00	80.00	30.38
Washers, Square, 2¼" x 2¼" for ¾" Bolt, Spec. 6150	C Pcs.	1.27	1.62	1.62
Wire, Copper, Bare, H.D., .105, 12 NBS, Spec. 6059	Cwt.	11.20	12.42	....
Wire, Steel, "BB", Galv., .109, 12 BWG, Spec. 6021	"	3.85	4.89	4.88

Ratio of Total Graybar Price to Total Western Electric Price	123.42%
Ratio of Total American Price to Total Western Electric Price	125.79%
Ratio of Total Graybar-American Price, whichever is Lower, to Total W. E. Price	120.54%

No. 536-A. February 1, 1934.

[fol. 1215] (2)

PLAINTIFF'S EXHIBIT A-28

C. & P. TEL. CO. OF B. C. v. WEST et al. U. S. Dist Ct. Eq. No. 2240
Witness: Cox
Date 3-20-34. Rec. p. 749

Supplies Not of Western Electric Company Manufacture

Washington, D. C., December 31, 1932

Comparison of Western Electric Company, Incorporated, Prices to Bell Telephone Companies under Standard Supply Contract on Specification Material with Prices in General Trade on Corresponding Material of Commercial Grade

Item (a)	Unit of price (b)	Prices f.o.b. Washington		
		Western Electric Company, Inc. (c)	Graybar Electric Company, Inc. (d)	American Electric Company (e)
Anchors, Everstick Expanding, #64, 4 way, 6"	Ea.	$.64	$.99	$.99
Anchors, Everstick Expanding, #84, 4 way, 8"	"	.98	1.56	1.55
Bolts, Carriage, ⅜" x 4", Galv., Spec. 6261	C Pcs.	1.21	1.71	1.71
Bolts, Machine, ½" x 4½", Galv., Spec. 6207	"	2.70	3.21	3.21

PLAINTIFF'S EXHIBIT A-28—Continued

Item (a)	Unit of price (b)	Prices f.o.b. Washington: Western Electric Company, Inc. (c)	Graybar Electric Company, Inc. (d)	American Electric Company (e)
Bolts, Crossarm, ⅝" x 10", Galv., Spec. 6309	" "	5.05	6.98	6.98
Bolts, Crossarm, ⅝" x 14", Galv., Spec. 6309	" "	6.60	8.63	8.63
Braces, Crossarm, 1-7/32" x 7/32" 30", Galv., Spec. 3529	" "	7.95	9.81	9.81
Clamps, Guy, 3 Bolt, 6" Smooth Heavy, Galv., Spec. 6090	" "	18.85	22.53	22.53
Conduit, Clay, 4 way, 3¼"—3½", Spec. 4700	C Duct Ft.	7.60	5.85	.....
Conduit, Creosoted Yellow Pine, 3" Bore, Spec. 4546	C Lin. Ft.	9.60	11.50	.....
Crossarms, Creosoted Yellow Pine, 3¼" x 4¼", 10' 10 Pin, Type A, Uneq., Spec. 6012	C Pcs.	85.00	89.19	96.61
Insulators, Glass, Double Petticoat, Spec. 4116	M Pcs.	50.50	58.07	59.78
Knobs, Porcelain, Type C, Spec. 4323	" "	11.00	16.56	15.84
Knobs, Porcelain, Type S, Spec. 4308	" "	12.30	15.34	16.26
Pins, Locust, 1¼" x 8", Spec. 6128	" "	26.50	24.57	13.01
Poles, Creosoted Southern Pine, 3-30, Spec. 6412	Ea.	7.88	9.85	.....
Poles, Creosoted Southern Pine, 4-35, Spec. 6412	"	8.81	11.95	.....
Poles, Creosoted Southern Pine, 5-30	"	5.81	7.27	.....
Poles, Creosoted Southern Pine, 6-25	"	3.84	4.58	.....
Poles, Creosoted Southern Pine, 7-25	"	3.21	3.85	.....
Poles, Creosoted Southern Pine, 9-20	"	2.08	2.46	.....
Rings, Bridle, ⅝", Type E, Galv., Spec. 4110	M Pcs.	5.30	8.09	8.20
Rings, Bridle, 1¼", Type C, Galv., Spec. 4110	" "	12.70	17.15	17.96
Rods, Ground, ⅝" x 8', Type B, Spec. 6037	C Pcs.	18.80	26.22	26.22
Rods, Thimble Guy, ⅝" x 8', Galv., Spec. 6043	" "	49.00	55.68	55.69
Screws, Fetter Drive, ⅝" x 4½", Galv., Spec. 6281	" "	2.25	2.68	2.68
Sleeves, Copper, .045, #17-B. & S. Half Length, Spec. 6030	M Pcs.	8.00	12.06	11.01
Sleeves, Copper, .104, #12 NBS, Full Length, Spec. 6030	" "	17.10	20.12	18.38
Sleeving, Lead, 4½" Diameter, Spec. 6046	C Lbs.	6.12	....	8.11
Solder, Bar, 40/60, Spec. 4301	C Lbs.	15.45	.....	17.96
Steps, Spike Head Pole, ⅝" x 10", Galv., Spec. 6140	C Pcs.	5.05	6.73	6.72

Strand, 6,000 Lb., Galv., Spec. 6179	M Ft.	10.30	12.28	12.06
Strand, 10,000 Lb., Galv., Spec. 6179	" "	14.75	21.56	21.16
Tape, Friction, Black, ¾", Spec. 6326	C Lbs.	15.70	18.62	25.48
Washers, Square, 2¼" x ¼", Spec. 6150	C Pcs.	1.27	1.46	1.45
Wire, Copper, H. D., #12 NBS, Spec. 6059	C Lbs.	8.50	8.52	.....
Wire, Iron, "BB", #12 BWG, Galv., Spec. 6021	" "	3.85	5.03	4.80

Ratio of Total Graybar Price to Total Western Electric Price	119%
Ratio of Total American Price to Total Western Electric Price	125%
Ratio of Total Graybar-American Price, whichever is Lower, to Total W. E. Price	117%

No. 776-B. April 4, 1933.

[fol. 1216] PLAINTIFF'S EXHIBIT A-29

C. & P. TEL. CO. OF B. C.

v.

WEST et al.

U. S. Dist. Ct. Eq. No. 2240

Witness: Cox

Date: 3-20-34. Rec. p. 755

Missouri-Illinois Sleet Storm December 18-19, 1924

Location—Area of 100 x 1,000 miles extending from Texas northeast through Missouri, Illinois and northern Indiana to the Canadian border. Principal damage done in Missouri and Illinois.

Character—Sleet, followed by zero weather (0° to -16° F.) Solid ice on wires up to 2" diameter with icicles 4"-9" long. High wind at times. Poles which stood up were sometimes stripped of wire and arms. Most serious sleet storm in Bell System experience.

Damage Done—

Poles Down	65,300 = 1,600 miles
Miles of Wire Down	20,280
Stations Out of Service	32,900
Estimated Cost of Reconstruction	$4,926,000

Supplies shipped in two weeks by St. Louis and Chicago houses—

Kind	Quantity	% to all other shipments in 1924
Bare Copper Wire	2,243,000 lbs.	67
Copper Tie Wire	133,000 lbs.	81
Bare Iron Wire	142,000 lbs.	12
Twisted Pair Wire	7,439,000 ft.	13
Sleeves	1,055,000	38
Poles	21,000	21
Crossarms	26,000	19

Western Electric Distributing Houses Making Emergency Shipments—Total 8—Oklahoma City, Kansas City, St. Louis, Chicago, Indianapolis, Dallas, Cleveland, Detroit.

Other Distributing Houses not Called on for Aid—Total 23—

Near-by—Total 7—Omaha, Des Moines, Minneapolis, Milwaukee, Cincinnati, Nashville, Houston.
More Distant—Total 16.

Illustrative Shipments—

Bare Copper Wire—3,500,000 lbs. (about 75 cars) shipped by suppliers on the average 1 day after order was received. 970,000 lbs. shipped same day order received.

Lead Covered Cable—19,000,000 conductor feet shipped by W. E. Co. same day order was received although not a stock item.

Creosoted Yellow Pine Poles—24,000 (about 500 cars) shipped by suppliers in one to four days after order received.

Insulated Wire—14 orders totaling 10,000,000 ft. (10 cars) shipped by suppliers same day order was received.

Traffic Arrangements—Special arrangements made with general officers of the Railroad and Express Companies. Through trains stopped at special points to pick up, deliver or transfer. Average saving of one day accomplished. For example, carload of insulated wire shipped from supplier at New Haven Conn., to Oklahoma City by express was delivered in two days equaling passenger service on limited trains. Each car traced through to destination and daily report of its progress rendered to point ordering.

Linemen Loaned from Other Companies—A total of 1,938 experienced foremen and linemen were sent into the storm area from other sections of the country. 13 states thus helped—Nebraska, Iowa, Indiana, Ohio, Wisconsin, Kentucky, Tennessee, Georgia, Pennsylvania, West Virginia, Maryland, New York, Massachusetts.

No. 405.

[fol. 1217] PLAINTIFF'S EXHIBIT A-30

C. & P. TEL. CO. OF B. C.

v.

WEST et al.

U. S. Dist. Ct. Eq. No. 2240

Witness: Gretz

Date: 3-21-34. Rec. p. 787

[fol. 1218] The Chesapeake and Potomac Telephone Company of Baltimore City

Book Costs and Units of Property Dec. 31, 1932, and Dec. 31, 1933

[fol. 1219]

The Chesapeake and Potomac Telephone Company of Baltimore City

Book Cost of Property

Summary

(Under the Accounting Classification in Effect Prior to January 1, 1933)

Account		Book cost December 31, 1932	Book cost December 31, 1933
200	Intangible Capital	$33,622	$33,622
207	Right of Way	934,220	937,403
211	Land	661,423	664,233
212	Buildings	2,882,043	2,875,437
221	Central Office Telephone Equipment:		
	Manual	7,995,271	7,964,773
	Dial	3,547,730	3,537,860
222	Other Equipment of Central Offices	363,401	358,864
231	Station Apparatus	3,832,859	3,846,983
232	Station Installations	1,049,960	1,081,405
233	Interior Block Wires	82,986	81,677
234	Private Branch Exchanges	1,585,307	1,571,211
235	Booths and Special Fittings	602,748	579,406
241	Exchange Pole Lines	3,785,817	3,786,328
251	Toll Pole Lines	1,601,270	1,570,799
242	Exchange Aerial Cable	4,577,472	4,625,622
252	Toll Aerial Cable	924,484	946,884
243	Exchange Aerial Wire	2,368,910	2,398,973
253	Toll Aerial Wire	875,963	886,415
244	Exchange Underground Conduit	3,852,903	3,861,566
254	Toll Underground Conduit	149,863	149,863
245	Exchange Underground Cable	6,209,515	6,254,000
255	Toll Underground Cable	868,091	861,570

Baltimore City—Continued

		Book cost December 31, 1932	Book cost December 31, 1933
246	Exchange Submarine Cable	19,230	20,260
256	Toll Submarine Cable	58,149	57,321
261	Office Furniture & Fixtures	532,975	314,100
262	General Shop Equipment	1,765	1,765
263	General Store Equipment	29,856	29,856
264	General Stable and Garage Equipment	299,667	262,227
265	General Tools and Implements	126,810	126,810
268	Interest During Construction	337,637	335,847
	Total	$49,991,947	$50,025,279

[fol. 1219½] Account 211

(Sheet 1)

The Chesapeake and Potomac Telephone Company of Baltimore City

Book Cost of Property

Land—Account 211

(Under the Accounting Classification in Effect Prior to January 1, 1933)

Baltimore City

	Book cost December 31, 1932	Book cost December 31, 1933
Curtis		
Location—541 Patapsco Avenue. Description—Rectangular, facing 100 feet 0 inches on Patapsco Avenue by 150 feet deep facing on Sixth Street with an area of 15,000 square feet	$10,821.08	$10,836.08
General Offices		
Location—108 East Lexington Street. Description—Rectangular, 45 feet 2 inches wide, facing on Lexington Street by 100 feet 0 inches deep facing Courtland Street (St. Paul), containing 4,530 square feet	48,892.48	48,892.48
Gilmor		
Location—1613-15 West Baltimore Street. Description—Irregular in shape, 50 feet wide facing Baltimore Street by an average depth of 64 feet 10 inches, containing 3,243 square feet	18,856.93	18,856.93
Hamilton		
Location—Bayonne Avenue and Harford Road. Description—Lot is irregular in shape, 133 feet 6⅛ inches wide, facing Harford Road by 205 feet 6 inches deep facing Bayonne Avenue, 127 feet 0 inches wide across rear by 246 feet 9 inches deep on the south, containing 28,718 square feet	21,180.30	21,351.11
Lafayette		
Location—1917-33 Madison Avenue. Description—Rectangular in shape, 143 feet ⅛ inches wide facing Madison Avenue by 128 feet 0 inches deep, containing 18,309 square feet	93,072.83	93,072.83

Account 211—Continued

Baltimore City

fol. 1220] (Sheet 2)

	Book Cost December 31, 1932	Book cost December 31, 1933
Liberty Location—3913 Cold Spring Lane. Description—Rectangular in shape, 100 feet 0 inches wide facing Cold Spring Lane by 240 feet 0 inches deep, containing 24,000 square feet	5,409.67	5,409.67
Madison Location—1915 Madison Avenue. Description—Rectangular in shape, 25 feet 0 inches wide facing Madison Avenue by 128 feet 0 inches deep, containing 3,200 square feet	4,535.29	4,535.29
Plaza. Location—5 Light Street. Description—Rectangular in shape, 40 feet 0 inches wide facing Light Street by 147 feet 4 inches deep, containing 5,892 square feet	81,297.25	81,297.25
Pleasant Street Location—St. Paul and Pleasant Streets. Description—Rectangular in shape, 138 feet 6 inches wide facing Pleasant Street by 181 feet 6 inches deep facing St. Paul Street, containing 25,138 square feet	204,342.72	209,008.42*
South Location—806 South Charles Street. Description—Rectangular in shape, 31 feet 9 inches wide facing Charles Street by 60 feet 0 inches deep, containing 1,900 square feet	6,665.99	6,665.99
University Location—216 East Thirty-first Street. Description—Rectangular in shape, 70 feet 0 inches facing Thirty-first Street by 159 feet 7 inches deep facing Guilford Avenue, containing 11,171 square feet	5,875.60	5,875.60
Vernon Location—801 St. Paul Street. Description—Rectangular in shape, 26 feet 0 inches wide facing St. Paul Street by 125 feet 0 inches deep facing Madison Street, containing 3,250 square feet	19,725.70	19,725.70
[fol. 1221] (Sheet 3)		
Wolfe Location—126 North Wolfe Street. Description—Rectangular in shape, 56 feet 0 inches wide facing Wolfe Street by 140 feet 3½ inches deep, containing 7,857 square feet	5,870.82	5,870.22
Residence Location—214 E. 31st Street. Description—Rectangular in shape, 15 feet 3 inches wide facing 31st Street by 159 feet 7 inches deep, containing approximately 2,434 square feet	1,993.47	.....**
Total in Baltimore City	$528,540.13	$531,406.57

* Under Accounting Classification in effect subsequent to January 1, 1933 these items are carried in Account 280—Construction Work in Progress.
** Transferred to Account 103—Miscellaneous Physical Property.

Account 211—Continued

[fol. 1222] Sheet 4

Maryland Elsewhere

	Book Cost December 31, 1932	Book Cost December 31, 1933
Aberdeen Location—Broadway near Bel Air Avenue, Aberdeen, Md. Description—Rectangular in shape, facing 70 feet on Broadway, 152 feet 4 inches deep, containing 10,661 square feet	$1,708.62	$1,708.62
Annapolis Location—7 North West Street, Annapolis, Md. Description—Irregular in shape, facing 44 feet 4 inches on West Street, 31 feet 4 inches deep on the west, 51 feet 11 inches deep on the east by 46 feet 4½ inches wide in the rear, containing 2,197 square feet	2,283.71	2,283.71
Arbutus Location—New Sulphur Spring Road near Birch Avenue, Arbutus, Md. Description—Rectangular in shape, facing 60 feet on New Sulphur Spring Road, 110 feet 0 inches deep, containing 6,600 square feet	3,537.62	3,537.62
Bel Air Location—Dallam Place near Courtland Street, Bel Air, Md. Description—Rectangular in shape, facing 50 feet on Dallam Place, 150 feet deep and has an area of 7,500 square feet	230.25	230.25
Bradley-Wisconsin Location—Wisconsin Avenue and Stanford Street, Chevy Chase, Md. Description—Irregular in shape, facing 66 feet 1 inch on Stanford Street by 136 feet 5 inches deep facing Wisconsin Avenue by 132 feet 6 inches deep on the east side by 98 feet 6 inches deep on the rear, containing 10,903 square feet	18,021.77	18,221.45

[fol. 1223] Sheet 5

Cambridge Location—205 High Street, Cambridge, Md. Description—Irregular in shape, facing 71 feet 8 inches on High Street by 109 feet 0 inches deep, containing 6,353 square feet	4,830.40	4,830.40
Catonsville Location—Bloomsbury Avenue, 157 feet south of Frederick Road, Catonsville, Md. Description—Irregular in shape, facing 132 feet 8½ inches wide on Bloomsbury Avenue by 147 feet 2½ inches deep on north by 128 feet 3½ inches wide on the rear by 140 feet ½ inch deep on the south, containing 19,164 square feet	4,791.81	4,817.61*
Cockeysville Location—3 York Road North of Ashland Avenue, Cockeysville, Md. Description—Wedge shaped toward the rear, facing 76 feet 5 inches on York Road by 229 feet 6 inches deep, 39 feet 6 inches wide on the rear and has an area of 12,351 square feet	565.83	565.83

	Book Cost December 31, 1932	Book Cost December 31, 1933
Cumberland Location—108-110 Union Street, Cumberland, Md. Description—Rectangular in shape, facing 49 feet 6 inches on Union Street by 136 feet deep, containing approximately 6,237 square feet	20,708.63	20,708.63
Darlington Location—Main Street and Locust Avenue, Darlington, Md. Description—Irregular in shape, having a spear point on the front. Lot is 344 feet by 126 feet 6 inches in the main portion; facing on the travelled road 601 feet, containing 49,789 square feet	576.98	576.98
Denton Location—118 Main Street, Denton, Md. Description—Lot is "L" shaped, facing 39 feet 5 inches on Main Street by 110 feet deep by 32 feet 9 inches wide across the rear, containing 3,927 square feet	3,890.16	3,890.16
[fol. 1234] Sheet 6		
Dundalk Location—8 Dunmanway, Dundalk, Md. Description—Rectangular in shape, facing 70 feet on Dunmanway by 77 feet 6 inches deep, containing 5,425 square feet	9,101.02	9,101.02
Easton Location—8 Court Street, Easton, Md. Description—Rectangular in shape, 51 feet 7 inches wide facing Court Street by 79 feet 10 inches deep, containing 4,130 square feet	3,384.63	3,384.63
Elkridge Location—Old Washington Road opposite Furnace Avenue, Elkridge, Md. Description—Irregular in shape, facing 27 feet 6 inches on Old Washington Turnpike by 70 feet 6 inches deep on the east, 77 feet 10 inches on the west and 29 feet 6½ inches wide on the rear, containing 2,089 square feet	635.45	635.45
Elkton Location—120 North Street, Elkton, Md. Description—Rectangular in shape, facing 20 feet 6 inches on North Street by 242 feet deep, containing 4,833 square feet	2,600.09	2,600.09
Frederick Location—33 East Patrick Street, Frederick, Md. Description—Rectangular in shape, facing 31 feet 2 inches on Patrick Street by 187 feet deep, containing 5,778 square feet	2,948.41	2,948.41
Hagerstown Location—23 South Jonathan Street, Hagerstown, Md. Description—Lot is "L" shaped, facing 58 feet 2 inches on Jonathan Street, 111 feet 7 inches on the rear, 168 feet deep from Jonathan Street, 61 feet 9 inches deep from the rear, containing 12,856 square feet	4,174.13	4,174.13

Account 211—Continued

Maryland Elsewhere

[fol. 1225] Sheet 7

	Book Cost December 31, 1932	Book Cost December 31, 1933
Hillsboro Location—Main Street near Academy Avenue, Hillsboro, Md. Description—Rectangular in shape, 20 feet 0 inches wide facing Main Street by 40 feet 0 inches deep, containing 800 square feet	$371.16	$371.13
Hyattsville Location—Northwest Corner of Washington Boulevard and Franklin Street, Hyattsville, Md. Description—Irregular in shape, facing 87 feet 0 inches on Washington Boulevard by 175 feet 0 inches deep on the north and 165 feet across the rear, containing 16,037 square feet	24,906.47	25,029.53
Pikesville Location—Old Court Road east of Reisterstown Road, Pikesville, Md. Description—Rectangular in shape, 40 feet wide facing Old Court Road by 147 feet 6 inches deep, containing 5,888 square feet	762.12	762.12
Ridgely Location—Third Street near Central Avenue, Ridgely, Md. Description—Rectangular in shape, 45 feet 0 inches wide facing Third Street by 50 feet 0 inches deep, containing 2,250 square feet	335.26	335.26
Salisbury Location—208 East Church Street, Salisbury, Md. Description—Irregular in shape, 53 feet 4 inches wide facing Church Street by an average depth of 189 feet, containing 10,090 square feet	6,075.90	6,075.90
Silver Spring Location—Faulkland Drive east of Georgia Avenue, Silver Spring, Md. Description—Rectangular in shape, 80 feet 0 inches wide facing Faulkland Drive by 200 feet 0 inches deep, containing 16,000 square feet	11,372.19	11,196.63

[fol. 1226] Sheet 8

Sykesville Location—Springfield Avenue near Main Street, Sykesville, Md. Description—Irregular in shape, facing 75 feet 0 inches on Springfield Avenue by 108 feet 8½ inches deep on the west and 121 feet 0 inches deep on the east by 76 feet 6 inches wide on the rear, containing 8,512 square feet	$1,229.73	$1,229.73
Towson Location—Pennsylvania Avenue near York Road, Towson, Md. Description—Rectangular in shape, facing 46 feet 6½ inches on Pennsylvania Avenue by 63 feet 3 inches deep, containing 2,938 square feet	2,301.31	2,313.09

Account 211—Continued

Maryland Elsewhere

Sheet 8—Continued

	Book Cost December 31, 1932	Book Cost December 31, 1933
Westminster Location—72-74 East Main Street, Westminster, Md. Description—Irregular in shape, south side facing 59 feet 0 inches on Main Street, 153 feet 3 inches deep and 69 feet 0 inches wide on the rear, containing 9,396 square feet	1,247.95	1,247.95
Wilna Location—Fallston Road near Ring Factory Road, Wilna, Md. Description—Irregular in shape, 83 feet 2 inches wide facing Fallston Road by an average depth of 254 feet, containing 22,433 square feet	50.22	50.22
Kent Island Location—Between Love Point and Stevensville. Description—Consists of an irregular parcel of land 280 feet 6 inches along Chesapeake Bay by 165 feet deep by 268 feet on east together with a 16 foot strip of land extending approximately 2,603 feet to the Public Road, containing 99,575 square feet	150.67	**
Total Outside Baltimore City	$132,882.49	$132,826.58
Grand Total	$661,422.62	$664,233.15

* Under Accounting Classification in effect subsequent to January 1, 1933, these items are carried in Account 280—Construction Work in Progress.
** Transferred to Account 103—Miscellaneous Physical Property.

[fol. 1227]

Account 212

Sheet 1

The Chesapeake and Potomac Telephone Company of Baltimore City

Book Cost of Property Buildings—Account 212

(Under the Accounting Classification in Effect Prior to January 1, 1933)

Baltimore City

	Book Cost December 31, 1932	Book Cost December 31, 1933
Curtis Location—541 Patapsco Avenue. Construction—Two stories and basement, brick bearing walls, steel beams, reinforced concrete floors, marble and wood trim, plastered walls and ceiling, wood stud and plastered partitions, non-fireproof	$50,759	$50,729
General Offices Location—108 East Lexington Street. Construction—Seven stories and basement, brick exterior walls, steel beams, girders and columns, terra cotta floor arches, plastered walls and ceilings hollow tile and plastered partitions, two elevators, fireproof	182,187	182,187

Account 212—Continued

Baltimore City

Sheet 1—Continued

	Book Cost December 31, 1932	Book Cost December 31, 1933
Storehouses Location—Elgin Avenue and Payson Street. Construction—Nine one-car metal garages	2,959	2,959
Gilmor Location—1613-15 West Baltimore Street. Construction—Three stories and basement, brick bearing walls, wood joists and floors, plastered walls and ceiling, wood stud and plastered partitions, non-fireproof	73,433	73,433
Lafayette Location—1917-33 Madison Avenue. Construction—Three stories without basement, steel skeleton frames, brick exterior walls, concrete floor arches, plastered walls, hollow tile and plastered partitions, fireproof	200,274	200,274
Liberty Location—3913 Cold Spring Lane. Construction—Two stories and basement, concrete beams and columns, combination concrete beam and terra cotta filler floor arches, brick exterior walls, plastered walls and ceiling, hollow tile and plastered partitions, fireproof	227,012	229,533

[fol. 1228] Sheet 2

Madison Location—1915 Madison Avenue. Construction—Three stories and partial basement, brick exterior walls, steel beams, terra cotta floor arches, plastered walls and ceiling, hollow tile and plastered partitions, fireproof	$72,430	$72,430
Plaza Location—5 Light Street. Construction—Eleven stories and basement, steel skeleton frame with brick exterior walls, terra cotta floor arches, plastered walls and ceiling, hollow tile and plastered partitions, two elevators, fireproof	809,632	809,634
South Location—806 South Charles Street. Construction—Three stories and basement, brick exterior bearing walls, wood joists and floors, plastered walls and ceiling, wood stud and plastered partitions, non-fireproof	9,336	9,336
University Location—216 East Thirty-First Street. Construction—Four stories and basement, steel beams and columns, brick walls, terra cotta and concrete floor arches, plastered walls and ceiling, hollow tile and plastered partitions, fireproof	254,771	254,771
Vernon Location—501 St. Paul Street. Construction—Three stories and basement—brick exterior bearing walls, steel beams, terra cotta floor arches, plastered walls and ceiling, hollow tile and plastered partitions, fireproof	88,261	88,261

Account 212—Continued

Baltimore City

Sheet 2—Continued

	Book Cost December 31, 1932	Book Cost December 31, 1933
Wolfe		
Location—126 North Wolfe Street.		
Construction—Four stories and basement, brick exterior walls, steel beams, cast iron columns, terra cotta floor arches, plastered walls and ceiling, hollow tile and plastered partitions, fireproof	190,708	190,708

[fol. 1229] Sheet 3

Residence		
Location—214 E. 31st Street.		
Construction—Two stories and basement, brick walls, wood joists and floors, stud and plaster partitions, non-fireproof	$9,756	..... *
Pleasant Street		
Location—St. Paul & Pleasant Streets.		
Preliminary expenditures in connection with future building	399	399
Total in Baltimore City	$2,171,917	$2,164,645

* Transferred to Account 103—Miscellaneous Physical Property.

[fol. 1230] Sheet 4

Maryland Elsewhere

Aberdeen Central Office		
Location—Broadway near Bel Air Avenue, Aberdeen, Md.		
Construction—Two stories, no basement; frame, stone foundation, shingle roof, non-fireproof	$3,692	$3,692
Aberdeen Store House		
Location—Broadway near Bel Air Avenue, Aberdeen, Md.		
Construction—One story, frame	75	75
Annapolis Central Office		
Location—7 North West Street, Annapolis, Md.		
Construction—One story and basement, brick walls, steel beams, plank floors, mill type construction, plastered walls and ceiling, stud and plastered partitions, non-fireproof	17,587	17,587
Arbutus Central Office		
Location—New Sulphur Spring Road near Birch Avenue, Arbutus, Md.		
Construction—Two stories, no basement, brick exterior walls, concrete first floor, wood joists and floors second floor, plastered walls and ceiling, wood stud and plastered partitions, non-fireproof	19,012	19,036
Arbutus Garage		
Location—New Sulphur Spring Road near Birch Avenue, Arbutus, Md.		
Construction—One car, metal garage	498	498

Account 212—Continued

Maryland Elsewhere

Sheet 4—Continued

	Book Cost December 31, 1932	Book Cost December 31, 1933
Bel Air Central Office Location—Dallam Place near Courtland Street, Bel Air, Md. Construction—One story, partial basement, frame walls, stone foundation, wood floors, stud and plastered partitions, slate roofing, non-fireproof.	7,063	7,063
Bel Air Store House and Garage Location—Dallam Place near Courtland Street, Bel Air, Md. Construction—One story frame.....	3,183	3,183
[fol. 1231] Sheet 5		
Bradley-Wisconsin Central Office Location—Wisconsin Avenue and Stanford Street, Chevy Chase, Md. Construction—Two stories, no basement, stone bearing walls, steel frame, concrete floor arches, wood ceiling and roof construction, plastered walls and ceiling, wood stud and plastered partitions, non-fireproof.....	$63,237	$63,237
Cambridge Central Office Location—205 High Street, Cambridge, Md. Construction—Two stories and basement, brick, wood joists and floor, plastered walls and ceiling, wood stud and plastered partitions, non-fireproof.	16,979	16,979
Cambridge Garage Location—205 High Street, Cambridge, Md. Construction—One car, metal garage.....	326	326
Cockeysville Central Office Location—3 York Road North of Ashland Avenue, Cockeysville, Md. Construction—Double three story frame building, tin roof, stud and plastered partitions.....	3,885	3,794
Cockeysville Garage Location—3 York Road North of Ashland Avenue, Cockeysville, Md. Construction—One car, metal garage.....	273	273
Cockeysville Pump House Location—3 York Road North of Ashland Avenue, Cockeysville, Md. Construction—One story, frame.....	51	.....
Cumberland Central Office Location—108–110 Union Street, Cumberland, Md. Construction—Three buildings—first, District Office building, two stories and no basement, brick walls, wood joists, stud and plastered partitions, non-fireproof; second, Business Office, two stories		
[fol. 1232] (Sheet 6)		
and no basement, brick walls, wood joists, lath and plastered partitions, non-fireproof; third, Central Office, three stories and no basement,		

Account 212—Continued

Maryland Elsewhere

Sheet 6—Continued

	Book Cost December 31, 1932	Book Cost December 31, 1933
brick bearing walls, steel beams, terra cotta floor arches, enclosed fire tower, fireproof	$40,393	$40,393
Darlington Central Office Location—Main Street and Locust Avenue. Construction—two stories, frame, non-fireproof	1,504	1,504
Denton Central Office Location—118 Main Street. Construction—Two stories and basement, concrete walls, wood floors and joists, plastered walls and ceiling, wood stud and plastered partitions, non-fireproof	11,726	11,726
Dundalk Central Office Location—8 Dunmanway, Dundalk, Md. Construction—Two stories and basement, brick exterior bearing walls, steal beams, wood joists and floors, plastered walls and ceiling, wood stud and plastered partitions, non-fireproof	51,360	51,360
Easton Central Office Location—6 Court Street, Easton, Md. Construction—Two stories and basement, brick, exterior bearing walls, wood joists and floors, plastered walls and ceiling, wood stud and plastered partitions, non-fireproof	15,180	15,180
Easton Garage Location—6 Court Street, Easton, Md. Construction—Two stories, brick, wood joists second floor, wood roof construction, non-fireproof	1,360	1,360
Elkridge Central Office Location—Old Washington Road opposite Furance Avenue, Elkridge, Md. Construction—One-half of a double two-story frame dwelling, brick foundation walls, plastered walls and ceiling, stud and plastered partitions, non-fireproof	1,414	1,414
[fol. 1233] (Sheet 7)		
Elkridge Store House Location—Old Washington Road opposite Furnace Avenue, Elkridge, Md. Construction—One story, frame	$ 20	$ 20
Elkton Central Office Location—120 North Street, Elkton, Md. Construction—Two stories, partial basement, brick exterior bearing wall, wood joists and floors, plastered walls and ceiling, wood stud and plastered partitions, non-fireproof	7,235	7,235
Frederick Central Office Location—33 East Patrick Street, Frederick, Md. Construction—Two stories and basement, brick exterior bearing walls, reinforced concrete floors and columns, tile and plastered partitions, plastered walls and ceilings, fireproof	18,915	18,915

Account 212—Continued

Maryland Elsewhere

Sheet 7—Continued

	Book Cost December 31, 1932	Book Cost December 31, 1933
Frederick Store House		
Location—33 East Patrick Street, Frederick, Md.		
Construction—One story, frame	475	475
Hagerstown District Office Building		
Location—33 South Jonathan Street, Hagerstown, Md.		
Construction—Two stories and basement, brick, with attic, wood joists and floors, stud and plastered partitions, plastered walls and ceiling, non-fireproof	7,745	7,745
Hagerstown Central Office Building		
Location—Rear of 33 South Jonathan Street, Hagerstown, Md.		
Construction—Three stories and no basement, brick exterior walls, steel beams, terra cotta floor arches, hollow tile and plastered partitions, fireproof	37,461	37,461
Hillsboro Central Office		
Location—Main Street near Academy Avenue, Hillsboro, Md.		
Construction—Two stories, no basement, frame, wood joists and floors, plastered walls and ceilings, wood stud and plastered partitions, non-fireproof	969	969
[fol. 1234] (Sheet 8)		
Hyattsville Central Office		
Location—Northwest corner of Washington Boulevard and Franklin Street, Hyattsville, Md.		
Construction—Three stories and partial basement, steel frame, brick exterior walls, limestone trim, reinforced concrete floors, plastered walls and ceilings, hollow tile, and plastered partitions, fireproof	$216,976	$216,976
Hyattsville Fence		
Location—4 Railroad Avenue, Hyattsville, Md		
Construction—Wire cyclone fence	467	467
Pikesville Central Office		
Location—Old Court Road east of Reisterstown Road, Pikesville, Md.		
Construction—One story and basement, brick exterior bearing walls, wood joists and floors, plastered walls and ceiling, wood stud and plastered partitions, non-fireproof	6,436	6,436
Pikesville Garage		
Location—Old Court Road east of Reisterstown Road, Pikesville, Md.		
Construction—One car metal garage	450	450
Ridgely Central Office		
Location—Third Street near Central Avenue, Ridgely, Md.		
Construction—Two stories and partial basement, brick and concrete block exterior walls, wood		

Account 212—Continued

Maryland Elsewhere

Sheet 8—Continued

	Book Cost December 31, 1932	Book Cost December 31, 1933
joists and floors, plastered walls and ceilings, wood stud and plastered partitions, non-fireproof	3,052	3,052
Ridgely Store House Location—Third Street near Central Avenue, Ridgely, Md. Construction—One story, frame	520	520
Salisbury Central Office Location—208 East Church Street, Salisbury, Md. Construction—Two stories and basement, brick exterior bearing walls, wood joists and floors, plastered walls and ceilings, wood stud and plastered partitions, non-fireproof	68,191	68,191
[fol. 1235] (Sheet 9)		
Salisbury Fence Location—Circle Avenue near Market Street, Salisbury, Md. Construction—Wire cyclone fence	$369	$369
Silver Spring Central Office Location—Faulkland Drive east of Georgia Avenue, Silver Spring, Md. Construction—Two stories, no basement, brick bearing walls, steel girders, concrete first floor, wood joists second floor and roof construction, plastered walls and ceiling, wood stud and plastered partitions, hollow tile and plastered partitions around boiler room, non-fireproof	51,926	52,193
Sykesville Central Office Location—Springfield Avenue near Main Street, Sykesville, Md. Construction—Two stories, brick, no basement, wood joists and floors, wood stud and plastered partitions, plastered walls and ceiling, non-fireproof	7,313	7,313
Sykesville Garage Location—Springfield Avenue near Main Street, Sykesville, Md. Construction—Two car metal garage	600	600
Towson Central Office Location—Pennsylvania Avenue near York Road, Towson, Md. Construction—Two stories, no basement, stone and brick exterior bearing walls, concrete first floor, wood joists and floor second floor, plastered walls and ceiling, wood stud and plastered partitions, tin roof, non-fireproof	9,987	10,895
Westminster Central Office Location—72-74 East Main Street, Westminster, Md. Construction—Three stories, no basement and one story addition, brick exterior bearing walls, wood joists and floors, lath and plastered partitions, plastered walls and ceiling, non-fire-proof	10,214	10,242

Account 212—Continued

Maryland Elsewhere

[fol. 1236] Sheet 10

	Book Cost December 31, 1932	Book Cost December 31, 1933
Westminster Store House		
Location—72-74 East Main Street, Westminster, Md.		
Construction—One and one-half stories, frame store house	$253	.....
Wilna Central Office		
Location—Fallston Road near Ring Factory Road, Wilna, Md.		
Construction—One and one-half stories, frame, stone foundation, shingle roof, tongue and groove partitions, wood joists and floors, non-fireproof	1,544	1,544
Wilna Store House		
Location—Fallston Road near Ring Factory Road, Wilna, Md.		
Construction—One story frame	35	35
Kent Island Cable House		
Location—Between Love Point and Stevensville.		
Construction—One story frame	175	..... *
Total Outside Baltimore City	710,126	710,783
Grand Total	$2,882,043	$2,875,437

* Transferred to Account 103—Miscellaneous Physical Property.

[fol. 1237]

Account 221

(Sheet 1)

The Chesapeake and Potomac Telephone Company of Baltimore City

Book Costs of Property

Central Office Equipment—Account 221

(Under the Accounting Classification in Effect Prior to January 1, 1933)

Baltimore City

Central Office	Type	Line Equipment Installed	Positions Installed A	B	Other	Total	Book Cost Dec. 31, 1932	Book Cost Dec. 31, 1933
Manual and Toll								
Broadway	#1	2,200	12	5	1	18	$131,010	$130,743
Calvert	#1	6,900	62	21	2	85	645,005	644,286
Central Cable	Loc. Desk	No. 1 Desk	..	..	..	2	5,295	5,373
Curtis	#11	1,000	5	3	2	10	55,812	55,702
Forest	#1D	6,200	34	11	5	50	413,950	413,947
Gilmor	#1	9,000	40	17	2	59	417,275	416,530
Hamilton	#1D	5,400	30	14	2	46	279,103	274,202
Madison	#1	10,500	56	19	2	77	591,062	590,219
Plaza	#1	9,500	88	30	4	122	888,740	887,556
Auxiliary Traffic Bureau	.....	.....	..	..	..	43	42,159	42,395
South	#1	3,000	20	8	3	31	174,078	173,883
Tuxedo	#1	3,600	26	7	2	35	287,047	287,129
Vernon	#1	8,800	62	20	5	87	653,005	651,650
Wolfe	#1	10,500	56	19	2	77	601,497	600,123
			Toll					
			CLR	IN	Tandem	Total		
Toll	#1	.....	85	24	10	119	515,817	515,432
Total Manual and Toll							$5,700,857	$5,689,170

[fol. 1238]

Baltimore City

(Sheet 2)

Central Office	"A" Bd.	End	"B" Bd.	Line Equip. Instl.	Frames L.F.	Dist. & Offc.	Inc.	Final	Total	Book Cost Dec. 31, 1932	Book Cost Dec. 31, 1933
Panel Dial											
Chesapeake	..	..	6	6,000	9	7	9	10	35	$430,936	$456,482
Lafayette	5	1	2	4,500	10	10	12	12	44	728,749	728,368
Liberty	7	2	3	8,500	17	18	14	19	68	1,322,217	1,321,651
University	14	1	3	6,970	14	15	13	16	58	1,065,826	1,031,359
Total Panel Dial										$3,547,730	$3,537,860
Total in Baltimore City										$9,248,587	$9,227,030

727

Account 221—Continued

(Sheet 8)

Maryland Elsewhere

Central Office	Type	Line Equipment Installed	Positions Installed					Book Cost Dec. 31, 1932	Book Cost Dec. 31, 1933
			A	B	Toll	Other	Total		
Manual Common Battery									
Annapolis	#8	1,580	9.5	..	6.5	..	16	$59,135	$59,198
Arbutus	#11	730	5	1	..	2	8	35,166	35,160
Bel Air	#9-D	380	4	..	6	..	10	21,606	21,526
Boulevard	#11	820	4	2	..	..	6	31,838	31,816
Bradley-Wise	#11	3,515	17	5	..	2	24	147,092	147,519
Cambridge	#10	840	5	..	4	..	9	32,339	32,297
Catonsville	#9-D	1,600	10	3	..	1	14	59,482	59,303
Chestertown	#10	460	2	..	4	..	6	27,193	27,085
Crisfield	#11	480	4	..	..	..	4	19,224	19,203
Cumberland	#1	3,560	19	1	13	2	35	222,339	220,137
Dundalk	#11	1,100	7	2	..	2	11	56,765	56,735
Easton	#10	920	4	..	9	..	13	99,460	99,490
Elkridge	#12	320	3	..	..	..	3	6,180	7,115
Elkton	#11	530	2	..	4	..	6	34,202	34,178
Ellicott City	#10	340	4	..	..	..	4	14,962	14,956
Frederick	#10	1,800	9	..	8	..	17	137,196	136,745
Frostburg	#9-D	460	4	..	..	1	5	12,231	12,220
Hagerstown	#1	3,300	16.5	1	12.5	2	32	213,364	209,577
Havre de Grace	#11	450	2	..	8	..	10	44,638	44,681
Hyattsville	#11	2,730	10	6	..	2	18	110,287	110,252
Lonaconing	#102	135	2	..	..	..	2	4,124	4,115
Pikesville	#1	820	9	2	..	2	13	56,934	56,548
Pocomoke City	#10	400	2.5	..	2.5	..	5	23,888	23,587
Rockville		(Magneto Office Replaced by C. B. Office)						.....	.....
	#12	420	3	..	..	..	3	.....	7,891
Salisbury	#10	1,680	8	1	14	..	23	228,478	228,421
Silver Spring	#11	2,710	12	4	..	2	18	134,060	133,896
Sykesville	#10	160	4	..	..	..	4	12,232	12,400
Sparrows Point	#4	400	3	..	..	..	3	19,663	19,619
Towson	#10	1,330	12	3	..	..	15	65,288	65,226
Westminster	#9	600	3.5	..	3.5	..	7	23,672	23,636
Woodlawn		(Magneto Office Replaced by C. B. Office)						.....	.....
	#12	340	2	..	..	..	2	.....	5,778
Total Common Battery—Maryland Elsewhere								$1,952,036	$1,953,606

Account 231—Continued

[fol. 1240]

(Sheet 4)

Maryland Elsewhere

Central Office	Type	Line Equipment Installed	Total Positions Installed	Book Cost Dec. 31, 1932	Book Cost Dec. 31, 1933
Magneto					
Aberdeen	#102	205	3	$8,978	$8,978
Armiger	#105-A & #1462	45	2	4,110	.....
	#105-A	45	2	.....	4,067
Ashton	#102	130	2	2,877	2,876
Berlin	#105-A	150	2	2,977	2,976
Berwyn	#105-B	390	4	10,664	10,898
Bowie	#105-B	70	1	6,783	6,627
Braddock Heights	#105-A	105	1	2,817	2,192
Brandywine	#105-A	65	1	4,419	4,417
Brunswick	#102	230	3	4,755	4,742
Buckeystown	#102	90	1	1,834	1,833
Capitol Hts.-Hillside	#105-B	670	5	12,425	12,399
Cecilton	#105-A	70	1	1,977	1,979
Centerville	#1462	200	4	5,910	5,906
Chase	#105-A	55	1	2,337	2,326
Chesapeake City	#1462	90	1	1,967	1,964
Churchville	#102	60	2	2,923	2,923
Clear Spring	#105-A	60	1	1,387	1,385
Cockeysville	#102 & #105-A	220	3	10,079	10,082
Damascus	#102	40	1	1,904	1,904
Darlington	#102	75	2	1,883	1,988
Deal Island	#105-A	70	2	3,232	.....
	#105-A	70	1	.....	2,267
Delmar	#105-A & #1462	150	2	5,368	5,365
Denton	Kellogg	220	3	4,562	4,521
Emmitsburg	#102	125	2	2,338	2,344
Essex	#105-A	405	3	12,258	12,194
Federalsburg	#102	183	2	3,118	3,118
Fork	#105-A	60	2	3,182	3,182
Gaithersburg	#102	195	3	4,126	4,126
Galena	#1462	35	1	1,374	1,374
Gibson Island	#105-B	130	2	3,017	3,011
Glenburnie	#105-A	225	3	7,760	7,298
Great Mills	#105-A	85	1	2,172	2,172
Greensboro	#105-A	90	1	1,728	1,729

[fol. 1241]

(Sheet 5)

Hampstead	#102	145	2	2,555	2,550
Hancock	#102	125	2	2,718	2,714
Hillsboro	#105-B	45	1	2,801	2,800
Hurlock	#1462	140	3	5,724	5,720
Jarrettsville	#105-A	55	1	1,329	1,333
Keedysville	#102	35	2	1,120	1,122
Kensington	#105-B	385	4	9,297	9,283
La Plata	#105-B	110	1	2,906	2,098
Laurel	#102 & #105-A	940	4	10,343	10,326
Leonardtown	#105-A	120	3	4,420	4,420
Linthicum	#105-B	270	2	7,919	7,901
Mechanicsville	#105-B & #1220	40	2	2,839	.....
	#105-B	50	1	.....	1,817

Account 221—Continued

Sheet 5—Continued

Maryland Elsewhere

Central Office Magneto	Type	Line Equipment Installed	Total Positions Installed	Book Cost Dec. 31, 1932	Book Cost Dec. 31, 1933
Middletown	#102	90	2	2,704	2,703
Millington	#105-A	60	1	1,772	1,772
Mt. Airy	#105-A	125	3	4,512	4,527
Mt. Savage	#105-B	100	1	2,031	2,026
Myersville	#102	45	1	1,201	1,201
New Market	#102	60	1	1,882	1,907
New Windsor	Special #102	70	2	3,257	3,254
North Beach	#105-B	120	1	2,556	2,557
North East	#1462	130	2	2,801	2,795
Oakland	#102	270	4	7,256	7,247
Ocean City	#105-A & #1462	335	3	6,422	6,411
Oxford	#105-A	70	1	2,207	2,205
Parkton	#105-A	60	1	3,329	3,335
Perryville	#105-A	210	2	4,949	4,945
Poolesville	#105-B	45	1	2,598	2,597
Fort Deposit	#1462	180	2	3,065	3,069
Preston	#105-A	75	1	2,307	2,310
Prince Frederick	#101	80	2	2,550	2,564
Princess Anne	#1462	210	2	2,783	2,782
Queenstown	#102	60	1	4,178	4,177
Reisterstown	#105-A	295	3	8,741	8,739
Ridgely	#105-A	100	1	1,786	1,782
Rising Sun	Toll Terminating Equipment			295	295
Rock Hall	#105-A	90	1	2,390	2,388
Rockville	#105-A	395	4	11,574	.....
	Magneto Office Replaced by Common Battery Office				.....
St. Michaels	#105-A	150	2	3,257	3,316
[fols. 1242-1253]	(Sheet 6)				
Severna Park	#105-B	200	2	5,967	5,961
Sharptown	#1462	50	1	691	751
Silver Run	#105-A	60	1	1,844	1,843
Smithsburg	#102	90	2	1,096	1,094
Snow Hill	#1462	210	2	2,846	2,843
Still Pond	#102	80	2	2,210	2,209
Taneytown	#105-A	70	2	2,948	2,952
Thurmont	#102	120	1	2,826	2,823
Tilghman	#102	95	2	2,824	2,813
Union Bridge	#105-A	80	1	2,412	2,527
Upper Marlboro	#105-B	130	2	6,141	6,260
Walkersville	#102	90	2	1,837	1,835
West River	#105-A	60	2	3,231	3,231
Williamsport	#105-A	115	2	3,568	3,410
Wilna	#105-A	40	1	1,695	1,694
Woodlawn	#105-A	335	3	8,090	.....
	Magneto Office Replaced by Common Battery Office				.....
Woodstock	#105-A	40	1	1,338	1,337
Total Magneto Offices Maryland Elsewhere				$342,378	$319,997
Total Maryland Elsewhere				$2,294,414	$2,275,603
Total Central Office Equipment				$11,543,001	$11,502,633

[fol. 1254] Account 241

Sheet 1

The Chesapeake and Potomac Telephone Company of Baltimore City

Units of Property

Exchange Pole Lines—Account 241

Poles—

Item	Quantity December 31, 1932	Quantity December 31, 1933
15 ft.	479	604
20 "	8,231	10,108
25 "	104,291	102,571
30 "	24,370	23,727
35 "	26,812	26,933
40 "	5,874	5,814
45 "	1,935	1,873
50 "	574	538
55 "	121	104
60 "	34	34
65 "	22	11
25 " Concrete	102	102
Guy Stubs—		
10 ft.	1	1
15 "	51	47
20 "	631	606
25 "	5,257	5,377
30 "	443	445
35 "	165	146
40 "	10	8
45 "	8	8
55 "	2	1
60 "	1	1
Push Braces—		
10 ft.	2	—
15 "	5	1
20 "	88	94
25 "	247	240

Account 241—Continued

Sheet 5—Continued

Item	Quantity December 31, 1932	Quantity December 31, 1933
30 "	137	143
35 "	33	33
40 "	5	5
50 "	2	2
Anchor Guys—		
Iron Wire	4,482	4,477
6 M Strand	16,335	16,319
10 M "	10,007	9,996
16 M "	1,034	1,033

[fol. 1255] Sheet 2

Other Guys—		
Iron Wire	2,470	2,468
6 M Strand	8,535	8,525
10 M "	2,756	2,753
16 M "	306	506
Crossarms—		
2 Pin	3,661	3,800
4 "	245	235
6 "	1,706	1,573
8 "	12	12
10 "	82,909	82,351
Back Braces—		
9 ft.	5,049	4,694
Guard Arms	7,884	8,309

Jointly Owned

Poles—

Item	% Owned	Quantity December 31, 1932	Quantity December 31, 1933
40 ft.	12	6	6
45 "		3	3
50 "		6	6
55 "		2	2

Account 241—Continued

Sheet 2—Continued

Poles—Continued

Item	% Owned	Quantity December 31, 1932	Quantity December 31, 1933
35 "	13	3	3
40 "		1	1
35 "	14	2	2
40 "		17	17
45 "		14	14
50 "		13	13
55 "		2	2
20 "	17	1	1
25 "		5	5
30 "		142	142
35 "		144	144
40 "		46	46
45 "		32	32
50 "		24	24
65 "		8	8
[fol. 1256]	Sheet 3		
45 "	20	2	2
50 "		12	12
30 "	25	12	10
25 "	33	2	2
30 "		4	4
35 "		32	32
40 "		51	51
45 "		140	138
50 "		50	51
55 "		5	5
60 "		1	1
65 "		1	1
30 "	37	16	16
35 "		45	41
40 "		12	12
45 "		5	5
25 "	50	76	79
30 "		523	533

Account 241—Continued

Sheet 3—Continued

Poles—Continued

Item	% Owned	Quantity December 31, 1932	Quantity December 31, 1933
35 "		6,571	6,763
40 "		1,004	1,063
45 "		415	432
50 "		156	171
55 "		48	48
60 "		14	12
65 "		4	3
75 "		1	1
25 " Concrete		8	8
35 " "		1	1
35 "	67	1	1
25 "	75	9	10
30 "		12	4
35 "		39	36
40 "		34	35
45 "		24	24
50 "		19	19
55 "		6	6
35 "	83	5	5
40 "		1	1
45 "		13	13
[fol. 1257]	Sheet 4		
45 "	86	2	2
50 "		4	4
55 "		4	4
60 "		3	3
65 "		3	3
30 "	88	5	5
35 "		6	6
40 "		9	9
45 "		3	3
30 "	94	16	16
35 "		6	6
40 "		5	5
50 "		2	2

Account 241—Continued

Sheet 4—Continued

Poles—Continued

Item	% Owned	Quantity December 31, 1932	Quantity December 31, 1933
35 "	95	10	10
40 "		11	11
Guy Stubs—			
25 ft.	14	3	3
25 "	17	1	1
30 "		4	4
25 "	25	2	—
25 "	33	3	3
20 "	37	1	1
25 "		7	7
15 "	50	1	1
20 "		9	11
25 "		106	113
30 "		95	99
35 "		12	9
40 "		5	5
25 "	75	1	1
30 "		3	4
25 "	88	1	1
25 "	94	1	1
25 "	95	3	3

[fols. 1258-1339] Sheet 5

Push Braces—			
25 ft.	14	1	1
30 "	17	1	1
35 "		2	2
40 "		4	4
45 "		1	1
30 "	37	1	1
35 "		1	1
30 "	50	5	5
35 "		5	5

[fol. 1340]

PLAINTIFF'S EXHIBIT A-31

C. & P. TEL. CO. OF B. C.

v.

WEST et al.

U. S. Dist. Ct. Eq. No. 2240

Witness: Greta

Date: 3-21-34. Rec. p. 796

The Chesapeake and Potomac Telephone Company of Baltimore City

Estimated Reproduction Cost New

Estimated Reproduction Cost Less Depreciation—As of December 31, 1932

		A Reproduction cost new	B Per cent. condition	C Reprod. cost less deprec.
	Directly Distributed Costs—			
1	Land—Baltimore City Only	$ 456,905	100.00	$ 456,905
2	Buildings	2,391,162	94.12	2,250,588
3	Central Office Telephone Equipment	8,968,742	90.17	8,087,115
4	Multiple P. B. X. Equipment	438,445	90.00	394,601
5	Other Station Equipment	6,018,825	85.00	5,116,001
6	Pole Lines	4,931,766	77.50	3,822,119
7	Aerial Cable	4,031,703	85.00	3,426,948
8	Aerial Wire	1,951,003	85.00	1,658,353
9	Underground Conduit	4,034,822	85.00	3,429,599
10	Underground and Submarine Cable	5,582,781	90.00	5,024,503
11	Total Directly Distributed Costs for Items Indicated	$38,806,154	86.76	$33,666,702
	Undistributed Construction Costs—			
12	Contingencies	$ 776,123		
13	Engineering	2,374,937		
14	Administration and Legal	1,258,716		
15	Insurance and Taxes	540,199		
16	Interest During Construction	2,406,587		
17	Total Appraised	$46,162,716	86.76	$40,050,772
	Properties Not Specifically Appraised—			
18	Land—Outside Baltimore City	$ 132,882	100.00	$ 132,882
19	Right of Way	934,220	100.00	934,220
20	Other Equipment of Central Offices	308,891	85.00	262,557
21	General Equipment	672,412	70.00	470,688
22	Total Estimated Reproduction Cost of Physical Property as of December 31, 1932	$48,211,121	86.81	$41,851,119
23	Going Value	4,500,000		4,500,000
24	Working Capital	1,615,000		1,615,000
25	Total	$54,326,121		$47,966,119

Plaintiff's Exhibit A-31—Continued

[fol. 1341] (2)

The Chesapeake and Potomac Telephone Company of Baltimore City

Appraisal as of December 31, 1932

Land—Account 211

As per Stipulation, dated March 15, 1934 (Clause 1)

Baltimore City Only, exclusive of Undistributed Construction Costs	$456,905
Outside of Baltimore City, inclusive of Undistributed Construction Costs	$132,882

Buildings—Account 212

Summary from Plaintiff's Exhibit No. A-9

Reproduction Cost New, exclusive of Telephone Company's Undistributed Construction Costs	$2,391,162
Reproduction Cost Less Existing Depreciation	$2,250,558
Composite Percent Condition	94.12%

Plaintiff's Exhibit A-31—Continued

[fol. 1342]

(3)

The Chesapeake and Potomac Telephone Company of Baltimore City

Estimated Reproduction Cost New—As of December 31, 1932

Central Office Telephone Equipment, Account 221

		A	B	C	D	E
			Translated to December, 1932, Cost Levels			
			Composite		Including Undistributed Const. Costs	Excluding Undistributed Const. Costs
		Amount	Index	Translator		
	Property Dec. 31, 1923, Still in Service Dec. 31, 1932—					
1	Appraised Cost Dec. 31, 1923, excluding Undistributed Construction Costs	$4,988,441	134.5	74.3	xxx	$3,708,175
2	Book Cost	4,650,259	xxx	xxx	xxx	xxx
	Additions 1924–32 Still in Service Dec. 31, 1932—					
3	Additions Year 1924	1,199,796	127.8	78.2	$938,715	853,867
4	1925	1,387,191	118.0	84.7	1,175,238	1,079,078
5	1926	896,473	110.6	90.4	810,728	742,592
6	1927	947,190	102.7	97.4	922,509	825,457
7	1928	173,271	94.7	105.6	182,983	164,287
8	1929	298,223	88.6	112.8	336,461	306,081
9	1930	1,420,656	98.4	107.0	1,520,616	1,346,718
10	1931	458,744	99.0	101.0	463,226	401,291
11	1932	111,198	103.4	96.7	107,495	89,131
12	Total Book Cost, December 31, 1932	$11,543,001	100.0			$9,516,677
13	Deduction for Piecemeal Construction included in Line 12, Col. E					547,935
14	Estimated Reproduction Cost New Dec. 31, 1932, at December, 1932, Wholesale Cost Levels, exclusive of Undistributed Construction Costs					$8,968,742

The Chesapeake and Potomac Telephone Company of Baltimore City

Estimated Reproduction Cost New—As of December 31, 1932

Multiple Private Branch Exchanges

		A	B	C	D	E
			Translated to December, 1932, Cost Levels			
			Composite		Including Undistributed Const. Costs	Excluding Undistributed Const. Costs
		Amount	Index	Translator		
	Property Dec. 31, 1923, Still in Service Dec. 31, 1932—					
1	Appraised Cost Dec. 31, 1923, excluding Undistributed Construction Costs	$226,189	124.2	80.5	xxx	$182,183
2	Book Cost	175,180	xxx	xxx	xxx	xxx
	Additions 1924–32 Still in Service Dec. 31, 1932—					
3	Additions Year 1924	58,828	127.3	78.6	$46,214	42,106
4	1925	41,815	117.6	85.0	35,549	32,673
5	1926	7,131	110.7	90.3	6,442	5,906
6	1927	58,096	101.6	98.4	57,194	51,206
7	1928	36,380	95.2	105.1	38,224	34,537
8	1929	67,680	88.8	112.6	76,209	69,335
9	1930	12,840	92.0	108.7	13,957	12,365
10	1931	4,806	100.6	99.4	4,779	4,141
11	1932	27,315	103.5	96.7	26,400	21,894
12	Total Book Cost, December 31, 1932	490,071	100.0			456,146
13	Deduction for Piecemeal Construction included in Line 12, Col. E					17,701
14	Estimated Reproduction Cost New Dec. 31, 1932, at December, 1932, Wholesale Cost Levels, exclusive of Undistributed Construction Costs					438,445

739

Plaintiff's Exhibit A-31—Continued

[fol. 1344] (5)

The Chesapeake and Potomac Telephone Company of Baltimore City

Analysis of Actual Expenditures—Years 1930, 1931, 1932—
for Station Equipment and Outside Plant

(and comparison with similar data used in estimating Reproduction Cost New as of December 31, 1932)

		Amount	Related to	Actual	Used in appraisal
	Exempt Materials and Supply Expense—				
1	Materials Disbursed...	$4,750,616			
2	Exempt (Small) Materials..... (Not disbursed but distributed over material disbursed on percentage basis)	266,553	(Materials (Disbursed (Line 1	5.61%	5.5%
3	Total Materials...	$5,017,169			
4	Total Materials equated to Dec. 1932 prices.....	$4,903,402			
5	Supply Expense.....	189,535	(Total (Materials (Line 4	3.86%	3.0%
6	Total Material and Supply Expense 1932 levels.....	$5,092,937			
	Labor, Plant Supervision, and Tool Expense—				
	Direct Labor—				
7	Actual.....	$2,450,654		$2,450,654	
8	Used in Appraisal*..	1,946,638			$1,946,638
9	Plant Supervision— Actual.....	150,994	(Direct) (Labor) (Line 8)	7.8%	8.0%
10	Tool Expense—Actual.	96,068		4.9%	4.0%
11	Miscellaneous Expense*	$ 651,878		$ 651,878	$ 371,979

*The appraisal figures shown for Direct Labor (Line 8) and Miscellaneous Expense (Line 11) are the result of equating the total appraisal for the separate accounts to the volume of construction placed in the three year period. The large reduction in these items as compared to the actual amounts shown are chiefly due to appraising the property under the wholesale reproduction theory.

[fol. 1345]

(6)

The Chesapeake and Potomac Telephone Company of Baltimore City

Estimated Reproduction Cost New—As of December 31, 1932

Station Equipment—Accounts 231 to 235

(Exclusive of Multiple Private Branch Exchanges)

		A	B	C	D	E	F	G	H	I
		Book Cost Unadjusted (Incl. Undist. Const. Cost)			Base for Col. E Translator (excl. Undist. Const. Cost)	Translators Dec. 1932=100		Adjusted to Dec., 1932, Reproduction Costs (Excl. Undist. Const. Cost)		
		Gross Additions 1924 to 1932	Retirements	Book Cost Dec. 31 each year 1923 to 1932		Gross Add.	Retirements*	Gross Add. (DxE)	Retirements (BxF)	Appraised cost Dec. 31, each year
1	Appraised Cost Dec. 31, 1923, excluding Undistributed Construction Costs				$3,473,587	91.9		xxx		$3,192,226
2	Book Cost Dec. 31, 1923			$3,550,259						
3	Year 1924	$ 860,530	$ 479,667	3,931,122	784,592	87.3	89.9	$ 684,949	$ 431,221	3,445,954
4	" 1925	833,836	554,507	4,210,451	795,072	85.2	87.7	677,401	486,303	3,637,052
5	" 1926	1,054,411	608,855	4,656,007	1,010,100	91.4	86.4	923,231	526,051	4,034,232
6	" 1927	841,228	775,802		778,316	97.1	86.6	755,745	671,845	
7	Dec. 1927 (Purchase)	488,141		5,209,569	488,141	106.9		521,823		4,639,955
8	Year 1928	1,124,588	894,700	5,439,457	1,076,599	94.6	89.1	1,017,517	797,178	4,860,294
9	" 1929	1,260,320	946,530	5,753,247	1,195,967	97.8	89.4	1,169,656	846,198	5,183,752
10	" 1930	1,595,702	1,191,978	6,156,971	1,528,764	100.1	90.1	1,530,293	1,073,972	5,640,073
11	" 1931	1,554,188	1,087,750	6,623,409	1,483,025	94.9	91.6	1,407,391	996,379	6,051,085
12	" 1932	1,290,492	1,250,112	6,663,789	1,217,480	91.2	91.4	1,110,342	1,142,602	6,018,825

* The retirement translators in Column F are determined from the relationship at December 31 of the preceding year of the appraised cost, exclusive of undistributed construction costs (Column I) to the book cost including undistributed construction costs (Column C). The application of these translators converts the book retirements (Column B) to the Dec. 1932 cost level and, in the same operation, automatically excludes undistributed construction costs (Column H).

41—648

741

Plaintiff's Exhibit A-31—Continued

[fol. 1346]

(7)

The Chesapeake and Potomac Telephone Company of Baltimore City

Index Numbers for Gross Additions of Station Equipment for Year 1931

(excluding Multiple Private Branch Exchanges)

		A	B	C	D	E
		Gross Additions for Year 1931				
			1931 Average Prices		Dec. 31, 1932 Prices	
	Principal Items	1931 Quantities Added	Unit Price	Amount (A x B)	Unit Price	Amount (A x D)
	Station Apparatus—					
1	Manual Desk Stands (20-AL and 40-AL) with Combination Cord	6,117	$2.50	$15,293	$2.50	$15,293
2	Dial Desk Stands (50-AL and 51-AL) with Combination Cord	8,142	2.45	19,948	2.45	19,948
3	Hand Telephone Sets (E-1-B Hand Set Handle, B-1-3 Hand Set Mounting, 395-B-3 Transmitter, 557-B-3 Receiver, Apparatus Blank and Cord	20,863	9.05	188,810	9.05	188,810
4	Dials 2-AB	6,665	3.45	22,994	3.55	23,661
5	Common Battery Subscriber Sets, Individual and two party (534-A)	31,287	3.36	105,124	3.45	107,940
6	Common Battery Subscriber Sets, Four Party selective (534-AR)	2,932	6.57	19,263	6.65	19,498
7	Common Battery Wall Set with Receiver Cord	290	5.16	1,496	5.28	1,531
8	Magneto Subscriber Set, Local Service (315-H)	2,104	9.23	19,420	10.35	21,776
9	Magneto Subscriber Set, Rural Service (300-K)	1,540	11.43	17,602	11.80	18,172
10	Magneto Wall Set with Receiver Cord (317-P)	378	14.29	5,402	15.08	5,700
11	Prepayment Coin Collector with Receiver Cord (50-G)	2,165	29.67	64,236	30.13	65,231
12	Postpayment Coin Collector with Receiver Cord (50-K)	576	24.87	14,325	25.33	14,590
13	Station Transmitter (323 and 337) lines 1+2+7+10+11+12	17,668	1.10	19,435	1.10	19,435
14	Station Receiver (144)	17,668	1.05	18,551	1.05	18,551
15	Station Protectors (58-AP)	17,351	.824	14,297	.824	14,297
16	Total Station Apparatus Material Cost			546,196		554,433

	Non-Multiple P.B.X. Switchboards—					
17	Nos. 505 and 506-A Cordless—7 Line Switchboards	184	167.70	30,857	174.20	32,053
18	No. 506-B Cordless—12 Line Switchboards	47	258.70	12,159	268.95	12,641
19	Nos. 550—30 Line and 551—40 Line Switchboards	81	449.80	36,434	455.85	36,924
20	Nos. 550—80 Line and 551—80 Line Switchboards	33	709.01	23,397	720.70	23,783
21	Nos. 550—320 Line and 551—320 Line Switchboards	4	789.70	3,159	804.20	3,217
22	Total Non-Multiple P.B.X. Switchboard Material Cost			106,006		108,618
	Booths and Special Fittings—					
23	Nos. 1 and 2 Booths	133	114.99	15,294	107.35	14,278
24	No. 5-A	162	140.25	22,721	121.16	19,628
25	No. 6-A	446	140.84	62,815	136.50	60,879
26	Total Booth Material Cost			100,830		94,785
	Inside Wires and Interior Block Wires—					
27	Wire and Minor Material (Cost per Station Basis)	38,531	.68	26,201	.616	23,735
28	Total Station Equipment Material (Lines 16+22+26+27)			779,233		781,571
29	Exempt Supplies (Small Material) % of Line 28		5.94%	46,286	5.50%	42,986
30	Total Station Equipment and Exempt Supplies			825,519		824,557
31	Supply Expense (% of Line 30)		3.76%	31,013	3.00%	24,737
32	Total Equipment, Exempt Supplies and Supply Expense			856,532		849,294
	Labor Cost—					
33	Station Apparatus, Inside Wire and Interior Block Wire Cost per Station Basis	38,531	3.00 ea.	115,593	2.37 ea.	91,318
34	Non-Multiple P.B.X. Switchboards (% of Line 22)		17.46%	18,509	10.80%	11,731
35	Booths and Special Equipment (% of Line 26)		3.86%	3,892	3.70%	3,507
36	Total Labor Cost			137,994		106,556
37	Plant Supervision Expense (% of Line 36)		7.91%	10,915	8.00%	8,524
38	Tool Expense (% of Line 36)		4.24%	5,851	4.00%	4,262
39	Traveling and Miscellaneous Expense (% of Line 36)		22.87%	31,560	20.00%	21,311
40	Grand Total (Lines 32+36+37+38+39)			$1,022,852		$989,947
41	Cost Index for Gross Installations Year 1932=100			105.34		
42	Translator					94.9

The Chesapeake and Potomac Telephone Company of Baltimore City

Estimated Reproduction Cost New—As of December 31, 1932

Exchange and Toll Pole Lines—Accounts 241 and 251

	Principal Items	Unit	A Dec. 31, 1932 Quantities	B Major Material and Freight: Unit Price	C Major Material and Freight: Amount (A x B)	D Other Material	E Total Disbursed Material (C + D)	F Direct Labor: Per Unit	G Direct Labor: Total (A x F)	H Misc. Expense
1	25 Ft. Poles	Each	126,012	$4.13	$520,430	$8,275	$528,705	$5.61	$706,927	$176,732
2	30 Ft. Poles	Each	53,645	6.05	324,552	5,160	329,712	6.22	333,672	83,418
3	35 Ft. Poles	Each	42,384	8.62	365,350	5,809	371,159	7.91	335,257	83,814
4	Anchor Guys—6M	Each	24,912	3.16	78,722	1,252	79,974	4.49	111,855	27,964
5	Other Guys—6M	Each	13,054	.93	12,140	193	12,333	1.70	22,192	5,548
6	Crossarms—10 Pin	Each	206,201	1.59	327,860	5,213	333,073	.73	150,527	37,632
7	Total Principal Items.				$1,629,054	$25,902	$1,654,956		$1,660,430	$415,108

	Principal Items	Estimated Reproduction Cost New
8	Total Disbursed Material (Line 7, Col. E)	$1,654,956
9	Exempt Materials (5.5% of 8)	91,023
10	Total Material Cost (8+9)	1,745,979
11	Supply Expense (3% of 10)	52,379
12	Total Material and Supply Expense (10+11)	1,798,358
13	Direct Labor (Line 7, Col. G)	1,660,430
14	Plant Supervision (8% of 13)	132,834
15	Tool Expense (4% of 13)	66,417
16	Miscellaneous Expense (Line 7, Col. H)	415,108
17	Total Cost in place of Principal Items (Lines 12 to 16)	4,073,147
18	Ratio of the Total Items to the Principal Items shown above	121.08%
19	Estimated Reproduction Cost New, exclusive of Undistributed Construction Costs, of the Total Property Units, December 31, 1932, using Spot December, 1932, Material Prices	$4,931,766

The Chesapeake and Potomac Telephone Company of Baltimore City

Estimated Reproduction Cost New—As of December 31, 1932

Exchange and Toll Aerial Cable—Accounts 242 and 252

	Principal Items	Unit	A Dec. 31, 1932 Quantities	B Major Material and Freight: Unit Price	B Major Material and Freight: Amount (AxB)	C Other Material	D Total Disbursed Material (C+D)	E Direct Labor: Per Unit	E Direct Labor: Total (AxE)	F Misc. Expense
1	Cable 24 ga., 51 pr.	Feet	2,019,726	$0.095	$191,874	$37,453	$229,327	$0.063	$127,243	$23,413
2	Cable 24 ga., 101 pr.	"	355,293	.159	56,492	8,298	64,790	.085	30,200	5,557
3	Cable 24 ga., 202 pr.	"	125,241	.275	34,441	4,017	38,458	.127	15,906	2,927
4	Cable 22 ga., 51 pr.	"	1,337,825	.114	152,512	26,720	179,232	.063	84,283	15,508
5	Cable 22 ga., 101 pr.	"	315,479	.198	62,465	8,293	70,758	.085	26,816	4,934
6	Cable 22 ga., 202 pr.	"	165,459	.343	56,752	6,917	63,669	.127	21,013	3,866
7	Cable 22 ga., 404 pr.	"	65,822	.608	40,020	4,062	44,082	.246	16,192	2,979
8	Cable 19 ga., 51 pr.	"	1,064,922	.173	184,232	25,995	210,227	.063	67,090	12,345
9	Cable 19 ga., 101 pr.	"	220,433	.304	67,012	8,568	75,580	.085	18,737	3,448
10	Terminals 14B	Each	18,651	5.05	94,188	4,709	98,897	10.325	192,572	35,433
11	Terminals 14C	"	16,323	5.92	96,632	4,832	101,464	10.384	169,498	31,191
12	Total Principal Items				$1,036,620	$139,864	$1,176,484		$769,550	$141,601

	Principal Items	Estimated Reproduction Cost New
13	Total Disbursed Materials (Line 12, Col. E)	$1,176,484
14	Exempt Materials (5.5% of 13)	64,707
15	Total Material Cost (13+14)	1,241,191
16	Supply Expense (3% of 15)	37,236
17	Total Material and Supply Expense (15+16)	1,278,427
18	Direct Labor (Line 12, Col. G)	769,550
19	Plant Supervision (8% of 18)	61,564
20	Tool Expense (4% of 18)	30,782
21	Miscellaneous Expense (Line 12, Col. H)	141,601
22	Total Cost in place of Principal Items (Lines 17 to 21)	2,281,924
23	Ratio of the Total Items to the Principal Items shown above	176.68%
24	Estimated Reproduction Cost New, exclusive of Undistributed Construction Costs, of the Total Property Units, December 31, 1932, using Spot December, 1932, Material Prices	$4,031,703

Plaintiff's Exhibit A-31—Continued

[fol. 1349]

(10)

The Chesapeake and Potomac Telephone Company of Baltimore City

Estimated Reproduction Cost New—As of December 31, 1932

Exchange and Toll Aerial Wire—Accounts 243 and 253

	Principal Items	Unit	A Dec. 31, 1932 Quantities	B Major Material and Freight: Unit Price	C Major Material and Freight: Amount (AxB)	D Other Material	E Total Disbursed Material (C+D)	F Direct Labor: Per Unit	G Direct Labor: Total (AxF)	H Misc. Expense
1	.104 Bare Copper Wire	Sgl. Mi.	19,060	$15.381	$293,162	$2,638	$295,800	$8.80	$167,728	$26,836
2	.080 Bare Copper Wire	"	1,951	9.549	18,630	168	18,798	8.80	17,169	2,747
3	.109 Bare Iron Wire	"	27,871	6.846	190,805	8,586	199,391	8.80	245,265	39,242
4	Drop Wires	Each	150,261	2.346	352,512	2,115	354,627	1.946	292,408	46,791
5	Total Principal Items				$855,109	$13,507	$868,616		$722,570	$115,616

	Principal Items	Estimated Reproduction Cost New
6	Total Disbursed Material (Line 5, Col. E)	$868,616
7	Exempt Materials (5.5% of 6)	47,774
8	Total Materials (6+7)	916,390
9	Supply Expense (3% of 8)	27,492
10	Total Material and Supply Expense (8+9):	943,882
11	Direct Labor (Line 5, Col. G)	722,570
12	Plant Supervision (8% of 11)	57,806
13	Tool Expense (4% of 11)	28,903
14	Miscellaneous Expense (Line 5, Col. H)	115,616
15	Total Cost in place of Principal Items (Lines 10 to 14)	1,868,777
16	Ratio of the Total Items to the Principal Items shown above	104.40%
17	Estimated Reproduction Cost New, exclusive of Undistributed Construction Costs, of the Total Property Units, December 31, 1932, using Spot December, 1932, Material Prices	$1,951,003

The Chesapeake and Potomac Telephone Company of Baltimore City

Estimated Reproduction Cost New—As of December 31, 1932

Exchange and Toll Underground Conduit—Accounts 244 and 254

	Principal Items	Unit	A Dec. 31, 1932 Quantities	B Major Material and Freight: Unit Price	C Major Material and Freight: Amount (A×B)	D Other Material	E Total Disbursed Material (C+D)	F Labor and Miscellaneous: Per Unit*	G Labor and Miscellaneous: Total (A×F)
1	Manholes—Brick	Each	3,623	$48.68	$176,368	$12,346	$188,714	$81.091	$293,793
2	Manholes—Concrete	"	1,007	35.57	35,819	2,507	38,326	77.182	77,722
3	Creosoted Wood—1 Duct	Tr. Ft.	337,312	.103	34,743	1,042	35,785	.522	176,077
4	Creosoted Wood—2 Duct	"	155,559	.206	32,045	961	33,006	.663	103,136
5	Creosoted Wood—4 Duct	"	104,726	.412	43,147	1,294	44,441	.633	66,292
6	Creosoted Wood—6 Duct	"	36,589	.618	22,612	678	23,290	.929	33,991
7	Creosoted Wood—8 Duct	"	20,009	.824	16,487	495	16,982	1.495	29,913
8	Single Terra Cotta— 1 Duct	"	149,913	.077	11,543	346	11,889	.735	110,186
9	Single Terra Cotta— 2 Duct	"	211,923	.154	32,636	979	33,615	.783	165,936
10	Single Terra Cotta— 4 Duct	"	143,739	.308	44,272	1,328	45,600	1.020	146,614
11	Single Terra Cotta— 6 Duct	"	36,365	.462	16,801	504	17,305	1.323	48,111
12	Single Terra Cotta— 8 Duct	"	19,938	.616	12,282	368	12,650	1.692	33,735
13	Single Terra Cotta—10 Duct	"	15,396	.770	11,855	356	12,211	2.022	31,131
14	Single Terra Cotta—12 Duct	"	16,678	.924	15,410	462	15,872	2.351	39,210
15	Multiple Terra Cotta— 4 Duct	"	240,582	.304	73,137	2,194	75,331	.891	214,359
16	Multiple Terra Cotta— 6 Duct	"	166,767	.457	76,213	2,286	78,499	1.192	198,786
17	Multiple Terra Cotta— 8 Duct	"	28,521	.608	17,341	520	17,861	1.486	42,382
18	Multiple Terra Cotta—10 Duct	"	21,006	.761	15,986	480	16,466	1.788	37,559
19	Total Principal Items				$688,697	$29,146	$717,843		$1,848,933

* Composite of unit costs for main and subsidiary conduit.

747

Plaintiff's Exhibit A-31—Continued

	Principal Items	Estimated Reproduction Cost New
20	Total Disbursed Material (Line 19, Col. E)	$717,842
21	Exempt Materials (5.5% of 20)	39,481
22	Total Material Cost (20+21)	757,324
23	Supply Expense (3% of 22)	22,719
24	Total Material and Supply Expense (22+23)	780,043
25	Direct Labor (80% of Col. G, Line 19)	1,479,146
26	Supervision (8% of 25)	118,332
27	Tool Expense (4% of 25)	59,166
28	Miscellaneous Expenses (20% of Col. G less Line 27)	310,622
29	Total Cost in place of Principal Items (Lines 24 to 28 inclusive)	2,747,309
30	Ratio of the Total Items (excluding paving) to the Principal Items shown above	122.77%
31	Estimated Reproduction Cost New, exclusive of Paving and Undistributed Construction Costs, of the Total Property Units, December 31, 1932, using Spot December, 1932, Material Prices	3,372,871
32	Paving Cost	661,951
33	Estimated Reproduction Cost New, exclusive of Undistributed Construction Costs, of the Total Property Units, December 31, 1932, using Spot December, 1932, Material Prices	$4,034,822

[fol. 1351]

The Chesapeake and Potomac Telephone Company of Baltimore City

Estimated Reproduction Cost New—As of December 31, 1932

Exchange and Toll Underground and Submarine Cable—Accounts 245, 246, 255, 256

	Principal Items	Unit	A Dec. 31, 1932 Quantities	B Major Material and Freight: Unit Price	C Major Material and Freight: Amount (AxB)	D Other Material	E Total Disbursed Material (C+D)	F Direct Labor: Per Unit*	G Direct Labor: Total (AxF)	H Misc. Expense
1	Cable 24 Ga. 51 Pr.	Feet	695,228	$0.095	$66,047	$5,862	$71,909	$0.2981	$207,247	$19,479
2	Cable 24 Ga. 101 Pr.	"	182,698	.159	29,049	1,884	30,933	.3127	57,130	5,371
3	Cable 24 Ga. 202 Pr.	"	106,221	.275	29,211	1,516	30,727	.3770	40,045	3,764
4	Cable 24 Ga. 404 Pr.	"	72,956	.481	35,092	1,450	36,542	.4348	31,721	2,982
5	Cable 24 Ga. 606 Pr.	"	38,310	.710	27,200	1,086	28,286	.5023	19,243	1,809
6	Cable 24 Ga. 1212 Pr.	"	288,083	1.320	380,270	11,842	392,112	.6087	175,356	16,484
7	Cable 22 Ga. 26 Pr.	"	179,950	.077	13,856	1,477	15,333	.2559	46,049	4,329
8	Cable 22 Ga. 51 Pr.	"	225,900	.114	25,753	1,942	27,695	.2906	58,870	5,533
9	Cable 22 Ga. 101 Pr.	"	119,093	.198	23,580	1,113	24,693	.2294	27,320	2,568
10	Cable 22 Ga. 202 Pr.	"	99,313	.343	34,064	1,261	35,325	.2471	24,540	2,307
11	Cable 22 Ga. 303 Pr.	"	66,755	.480	32,042	1,038	33,080	.2465	16,455	1,547
12	Cable 22 Ga. 404 Pr.	"	321,883	.608	195,705	6,237	201,942	.2885	92,863	8,730
13	Cable 22 Ga. 606 Pr.	"	247,519	.880	217,817	6,829	224,646	.3625	89,726	8,433
14	Cable 22 Ga. 909 Pr.	"	438,985	1.280	561,901	17,471	579,372	.4853	213,039	20,026
15	Cable 19 Ga. 303 Pr.	"	215,650	.790	170,364	5,310	175,674	.2330	50,246	4,724
16	Cable 19 Ga. 455 Pr.	"	26,214	1.150	30,146	938	31,084	.2929	7,678	722
17	Terminals B-51	Each	890	58.99	52,501	1,234	53,735	2.443	2,173	204
18	Total Principal Items				$1,924,508	$68,490	$1,993,088		$1,159,701	$190,012

* Composite of unit costs for main, subsidiary, house and block cables.

749

Plaintiff's Exhibit A-31—Continued

	Principal Items	Estimated Reproduction Cost New
19	Total Disbursed Material (Line 18, Col. E)	$1,993,088
20	Exempt Materials (5.5% of 19)	109,620
21	Total Material Cost (19+20)	2,102,708
22	Supply Expense (3% of 21)	63,081
23	Total Material and Supply Expense (21+22)	2,165,789
24	Direct Labor (Line 18, Col. G)	1,159,701
25	Plant Supervision (8% of 24)	92,776
26	Tool Expense (4% of 24)	46,388
27	Miscellaneous Expense (Line 18, Col. H)	109,012
28	Total Cost in place of Principal Items (Lines 23 to 27)	3,573,666
29	Ratio of the Total Items to the Principal Items shown above	156.22%
30	Estimated Reproduction Cost New, exclusive of Undistributed Construction Costs, of the Total Property Units, December 31, 1932, using Spot December, 1932, Material Prices	$5,582,781

Plaintiff's Exhibit A-31—Continued

[fol. 1352] (13)

The Chesapeake and Potomac Telephone Company of Baltimore City

Estimated Reproduction Cost New—As of December 31, 1932

Insurance and Taxes and Interest During Construction

(Exclusive of Properties Not Specifically Appraised)

	Amount appearing on Co. Ex.	Per cent	Application of Rates to Revised Amount (incl. Results of Stipulation)
Directly Distributed Costs for Properties Specifically Appraised, Contingencies, Engineering, Administration and Legal Expenses	$43,299,321		$43,215,930
Insurance and Taxes	543,032	1.25%	540,199
Sub-Total	$43,842,353		$43,756,129
Interest During Construction	$2,422,860	5.5%	$2,406,587

[fol. 1353] (14)

The Chesapeake and Potomac Telephone Company of Baltimore City

Estimated Reproduction Cost New—As of December 31, 1932

Right of Way—Account 207

This account consists of salaries of Rights of Way Agents, payments to property owners and initial permit fees paid to municipalities. Current Costs during the three year period ended December 31, 1932 were approximately 28% higher than the cumulative average unit costs as shown by the books at that date. It is estimated that the Reproduction Cost New of existing Rights of Way if acquired under the wholesale basis would be not less than the book cost of $934,220

[fol. 1354] (15)

The Chesapeake and Potomac Telephone Company of Baltimore City

Estimated Reproduction Cost New—As of December 31, 1932

Other Equipment of Central Offices—Account 222

General Equipment—Accounts 261-265

The following group of accounts is composed for the most part of small items which have a comparatively short life and which are inventoried as to quantities annually. Sample items have been taken from each group and the amounts at which they are carried on the books have been compared with current prices. The ratios thus obtained have been applied to the Book Cost with the following results:

	Book Costs Dec. 31, 1932	Ratio Dec. 1932 to avg. Book Costs	Reproduction Cost New
222—Other Equip. of Central Off	$363,401	87.2	$316,886
251—Office Furniture & Fixtures	332,975	92.5	308,002
262—General Shop Equipment	1,765	87.2	1,539
263—General Store Equipment	29,856	87.2	26,034
264—Gen. Stable & Garage Equip	299,667	100.0	299,667
265—General Tools & Implements	126,810	94.7	120,089
Total General Equipment	$791,073	95.5	$755,331

Making further allowance because current prices for some items in the office machine and automobile classes are for articles which carry improvements over the models in use, the reproduction cost new is estimated at not less than 85% of the Book Cost as follows:

Other Equipment of Central Offices	$308,891
General Equipment	672,412

[fol. 1355] PLAINTIFF'S EXHIBIT A-32

C. & P. TEL. CO. OF B. C. v. WEST et al. U. S. Dist. Ct. Eq. No. 2240

Witness: Greta

Date: 3-21-34. Rec. p. 875

The Chesapeake and Potomac Telephone Company of Baltimore City

Estimated Reproduction Cost New

Estimated Reproducton Cost Less Depreciation

As of December 31, 1933

		A Reproduction cost new	B Per cent condition	C Reprod. cost less deprec.
	Directly Distributed Costs—			
1	Land	$456,905	100.00	$456,905
2	Buildings	2,768,627	93.53	2,589,421
3	Central Office Telephone Equipment	8,935,511	89.32	7,981,198
4	Multiple P.B.X. Equipment	423,561	90.00	381,205
5	Other Station Equipment	6,024,601	85.00	5,120,911
6	Pole Lines	4,847,715	75.50	3,660,025
7	Aerial Cable	4,037,116	85.00	3,431,549
8	Aerial Wire	2,075,252	85.00	1,763,964
9	Underground Conduit	4,412,334	85.00	3,750,484
10	Underground and Submarine Cable	5,554,782	89.00	4,943,756
11	Total Directly Distributed Costs for Items Indicated	$39,536,404	86.20	$34,079,418
	Undistributed Construction Costs—			
12	Contingencies	$790,728		
13	Engineering	2,419,628		
14	Administration and Legal	1,282,403		
15	Insurance and Taxes	550,365		
16	Interest During Construction	2,451,874		
17	Total Appraised	$47,031,402	86.20	$40,541,069
	Properties Not Specifically Appraised—			
18	Land—Outside Baltimore City	$132,882	100.00	$132,882
19	Right of Way	937,403	100.00	937,403
20	Other Equipment of Central Offices	305,035	85.00	259,280
21	General Equipment	624,545	70.00	437,182
22	Total Estimated Reproduction Cost of Physical Property as of December 31, 1933	$49,031,267	86.29	$42,307,816
23	Going Value	$4,500,000		$4,500,000
24	Working Capital	1,615,000		1,615,000
25	Total	$55,146,267		$48,422,816

[fol. 1356] (2)

The Chesapeake and Potomac Telephone Company of Baltimore City

Appraisal as of December 31, 1933

Land—Account 211

As per Stipulation, dated March 15, 1934 (Clause 1).

Baltimore City Only, exclusive of Undistributed Construction Costs	$456,905
Outside of Baltimore City, inclusive of Undistributed Construction Costs	$132,882

Buildings—Account 212

Summary from Plaintiff's Exhibit No. A-10

Reproduction Cost New, exclusive of Telephone Company's Undistributed Construction Costs	$2,768,627
Reproduction Cost Less Existing Depreciation	$2,589,421
Composite Percent Condition	93.53%

[fol. 1357] (3)

The Chesapeake and Potomac Telephone Company of Baltimore City

Estimated Reproduction Cost New—as of December 31, 1933

Central Office Telephone Equipment, Account 221

1	Reproduction Cost New, December 31, 1932 excluding undistributed Construction Cost.		$8,968,742
2	Gross Additions—Year 1933	$27,043	
3	Material Portion of Book Gross Additions	15,582	
4	Equipment Specifications and Installation Costs on wholesale reproduction basis	3,564	
5	Total Gross Additions excluding undistributed Construction Costs on wholesale reproduction basis (3 + 4)		19,146
	Adjustment of Book Retirements to Reproduction Cost and to exclude Undistributed Construction Costs		
6	Book Cost December 31, 1932	11,543,001	
7	Retirements—Year 1933	67,412	
8	Portion of Property in service at beginning of year retired during Year 1933	.584%	
9	Reproduction Cost New of Property Retired (1 x 8)		52,377
10	Reproduction Cost New, December 31, 1933 excluding undistributed Construction Costs (1 + 5 − 9)		$8,935,511

[fols. 1358-1360] (4)

The Chesapeake and Potomac Telephone Company of Baltimore City

Estimated Reproduction Cost New—As of December 31, 1933

Multiple Private Branch Exchange Equipment

1	Reproduction Cost New, December 31, 1932 excluding undistributed Construction Cost		$438,445
2	Gross Additions—Year 1933	37,071	
3	Material portion of Book Gross Additions	2,755	
4	Equipment Specifications and Installation costs on wholesale reproduction basis	929	
5	Total Gross Additions excluding undistributed Construction Costs on wholesale reproduction basis (3 + 4)		3,584
	Adjustment of Book Retirements to Reproduction Cost and to exclude Undistributed Construction Costs		
6	Book Cost December 31, 1932	440,071	
7	Retirements—Year 1933	20,754	
8	Portion of property in service at beginning of year retired during year 1933	4.235%	
9	Reproduction Cost New of Property Retired (1 x 8)		18,568
10	Reproduction Cost New December 31, 1933 excluding undistributed Construction Costs (1 + 5 − 9)		$423,561

PLAINTIFF'S EXHIBIT A-33

[fol. 1367] C. & P. TEL. CO. OF B. C. v. WEST et al. U. S. Dist. Ct. Eq. No. 2240

Witness: Gretz

Date: 3-21-34. Rec. p. 882

The Chesapeake and Potomac Telephone Company of Baltimore City

Working Capital

As of December 31, 1932, and

As of December 31, 1933

The following data relate to that portion of the property of The Chesapeake and Potomac Telephone Company of Baltimore City herein designated as its Working Capital, which property is used in the furnishing of telephone service throughout the State of Maryland.

The results of this study for the years 1931, 1932, 1933, and the three year average are shown below. Pages 2 to 7 of this exhibit illustrate the computation of the amounts for the years 1931 and 1932.

	1931	1932	1933	Average
(a) Materials and Supplies	$466,548	$348,356	$232,786	$349,230
(b) Working Cash—				
(1) Cash	336,504	388,073	235,059	319,879
(2) Employees' Working Funds	24,584	21,278	16,723	20,862
(3) Service Rendered in Advance	974,276	904,824	896,204	925,101
Total Working Cash	1,335,364	1,314,175	1,147,986	1,265,842
Total	1,801,912	1,662,531	1,380,772	1,615,072
Total Working Capital, December 31, 1932, and December 31, 1933				$1,615,000

42—648 [fol. 1368]

(2)

The Chesapeake and Potomac Telephone Company of Baltimore City

Material and Supplies

Average Material and Supplies on Hand During the Years 1931 and 1932

	Year 1931			Year 1932		
Average for month:	Material & supplies	Class "C" stock	Total	Material & supplies	Class "C" stock	Total
1 January	$304,068	$193,523	$497,591	$164,375	$143,048	$307,423
2 February	319,769	185,772	505,541	176,850	153,039	329,889
3 March	352,843	180,423	533,266	196,392	160,969	357,361
4 April	359,861	189,920	549,781	226,730	173,444	400,174
5 May	312,792	191,036	503,828	245,161	174,049	419,210
6 June	294,481	177,250	471,831	252,375	158,909	411,284
7 July	275,016	160,698	435,714	232,328	133,955	366,283
8 August	260,309	152,971	413,280	209,439	126,957	336,396
9 September	279,722	168,674	448,396	211,349	133,427	344,776
10 October	288,758	174,939	463,697	204,309	122,795	327,104
11 November	264,796	160,890	425,686	185,281	112,999	298,280
12 December	203,443	146,521	349,964	165,132	116,960	282,092
13 Basis for Average	$3,515,958	$2,082,617	$5,598,575	$2,469,721	$1,710,551	$4,180,272
14 Average of Monthly Averages	292,997	173,551	466,548	205,810	142,546	348,356

Note.—Class "C" Stock represents recovered material returned to the Western Electric Company for repairs and temporarily held by that company for the order of the Telephone Company.

757

[fol. 1369] (3)

The Chesapeake and Potomac Telephone Company of Baltimore City

Working Cash—Cash

The cash funds of the Company are carried in one general checking account and 71 depositories scattered throughout the State. 48 of these depositories act as collection agencies for the Company for which no direct charge is made but for which, in some cases, we are required to maintain a fixed minimum deposit.

The average daily balances carried in the Cash Account for each month during the years 1931 and 1932 are as follows:

		Year, 1931	Year, 1932
1	January	$206,147	$369,081
2	February	293,850	473,550
3	March	372,205	433,670
4	April	222,457	177,503
5	May	267,344	334,294
6	June	489,325	419,270
7	July	406,253	419,643
8	August	326,976	361,672
9	September	285,964	462,446
10	October	417,030	393,641
11	November	435,000	359,115
12	December	315,492	452,991
13	Total	$4,038,043	$4,656,876
14	Average for Year	336,504	388,073

[fol. 1370] (4)

The Chesapeake and Potomac Telephone Company of Baltimore City

Working Cash—Employees' Working Funds

These funds of the Company are carried in seven main working advance funds, one in the headquarters of each of the departments of the Company, from which numerous sub-advances are made throughout the State of Maryland.

Disbursements from these funds are authorized for reimbursement for postage, traveling and other incidental expenditures made by employees on behalf of the Company. These funds are also used for the payment of the smaller bills and those wherein the time interval for discounts allowed is too limited for payment through the general cash fund of the Company. The balance in this account at the end of each month is the gross amount of money advanced less the claims for reimbursement for expenditures which have been made.

The balances carried in this account at the end of each month during the years 1931 and 1932 are as follows:

		Year, 1931	Year, 1932
1	January	$28,314	$21,540
2	February	25,892	25,947
3	March	24,177	30,275
4	April	36,992	22,825
5	May	23,733	21,984
6	June	29,581	28,269
7	July	24,042	18,445
8	August	21,384	20,835
9	September	19,612	18,314
10	October	19,981	14,632
11	November	22,197	15,952
12	December	19,103	16,323
13	Total	$295,008	$255,341
14	Average for Year	24,584	21,278

[fol. 1371] (5)

The Chesapeake and Potomac Telephone Company of Baltimore City

Working Cash—Service Rendered in Advance

Under this heading is valued the service rendered to subscribers in advance of collection. Because of billing rentals in advance the impression is sometimes gathered that the telephone company makes its collections in advance of rendering the service. There are, however, large amounts for messages and tolls which are billed in arrears, and which more than offset the billing of rentals in ad-

vance. A detailed study of the average billing and average collecting as compared to the average date of rendering the service has been made and shows approximately 25 days between the date of rendering the service and the collection therefor. This study has been made along the following lines:

Each of the central offices in Maryland is assigned to one of six billing groups, which are spaced at five day intervals, to permit rotation billing and avoid peak work loads in the billing office. The major portion of the rentals is billed for the fiscal month in advance of the date of the bill, and tolls and additional local messages for the fiscal month in arrears. Bills are mailed approximately seven days after the date of the bill or beginning of the new fiscal month.

Page 6 shows for two sample months, a summary analysis of the billing to determine the relation between the average date of furnishing service and the date of rendering the monthly bills. Weighted for all classes of service in the entire State of Maryland, there is a lag of 10.19 days in the billing, which includes the seven (7) days which are required to prepare the bills.

The daily collections for the sample months were studied to determine the average time between rendering the bill and payment, deducting the seven (7) days allowed to prepare the bill. Page 7 shows a summary of this tabulation, which results in an average period of 15.09 days.

Adding the lag in billing of 10.19 days and the lag in collection after billing of 15.09 days gives a total period between the average date of rendering the service and the average date of collection of approximately 25 days, which, expressed in terms of gross revenue for the years 1931 and 1932 shows the value of the service rendered in advance of collections as $974,276 and $904,824, respectively.

The Chesapeake and Potomac Telephone Company of Baltimore City

Billing and Collection of Subscribers' Accounts for Months of July, 332, and January, 1933

		A	B	C	D	E	F	G
			Billed during period					
		Balance billed and unpaid end of previous period	Tolls to end of previous period	Additional local messages	Misc.* Due when billed or collected	Rentals in arrears	Rentals in advance	Total for collection current period
1	July, 1932	$326,219	$252,799	$129,548	$139,773	$2,612	$635,768	$1,486,719
2	January, 1933	375,091	252,705	152,464	141,040	2,518	609,918	1,533,736
3	Total for two months	701,310	505,504	282,012	280,843	5,130	1,245,686	3,020,455
4	Estimated time between date of rendering service and date of issuing bill	†33.22 Days	22 Days	22 Days	0 Days	22 Days	−8 Days	xxx
5	Total dollar-days between average date of rendering service and date of issuing bill	$23,297,516	$11,121,088	$6,204,264	—	$112,860	$−9,965,488	$30,770,242
6	Weighted average time between average date of rendering service and date of issuing bill	xxx	xxx	xxx	xxx	xxx	xxx	10.19 Days
7	Estimated time between date of issuing bill and average date of collection	xxx	xxx	xxx	xxx	xxx	xxx	15.09 Days
8	Total elapsed time between average date of rendering service and average date of collection							25.28 Days

Value of service rendered in advance of collections—

9 Year 1931: 25 ÷ 365 x $14,224,431 (Gross Opr. Rev. less Uncoll. Opr. Rev.).....$974,276

10 Year 1932: 25 ÷ 365 x $13,210,430 (Gross Opr. Rev. less Uncoll. Opr. Rev.).....$904,824

* Includes pay station collections, service Connection charges, moves charged subscribers, and similar items. The perod between rendition of service and collections from coin boxes is included in Line 7, having been assumed at zero (0) days in Line 4.

† Determined by adding 30 days to weighted average of Columns B, C, D, E & F.

761

[fol. 1373] (7)

The Chesapeake and Potomac Telephone Company of Baltimore City

Average Period of Collections After Bills Are Rendered Based on Billing and Collections During the Months of July, 1932, and January, 1933)

A Days after billing	B Collections	C Dollar days (A x B)
1	$31,090.89	$31,090.89
2	29,969.74	59,939.48
3	36,025.15	108,075.45
4	68,907.96	275,631.84
5	63,593.21	317,966.05
6	83,582.35	501,494.10
7	91,832.01	642,824.07
8	96,006.44	768,051.52
9	84,017.80	756,160.20
10	86,805.66	868,056.60
11	99,692.43	1,096,616.73
12	79,082.37	948,988.44
13	95,889.83	1,246,567.79
14	114,314.32	1,600,400.48
15	98,967.79	1,484,516.85
16	74,916.21	1,198,659.36
17	58,758.34	998,891.78
18	72,734.59	1,309,222.62
19	56,239.80	1,068,556.20
20	62,577.13	1,251,542.60
21	56,278.79	1,181,854.59
22	52,389.78	1,152,575.16
23	55,751.92	1,282,294.16
24	48,376.88	1,161,045.12
25	54,698.74	1,367,468.50
26	43,295.44	1,125,681.44
27	40,371.67	1,090,035.09
28	40,488.67	1,133,682.76
29	51,834.77	1,503,208.33
30	30,599.86	917,995.80
31	23,516.49	729,011.19
Total	$1,982,607.03	$29,178,105.19

Public and semi-public pay Station Collections	254,193.00	*4,580,557.86
Total	$2,236,800.03	$33,758,663.05

Average period between rendition of bill and collection ..... 15.09 Days

* Collections from coin boxes range from weekly to quarterly. Average period between collections, 18.02 days, weighted according to amounts and periods between collections.

]fol. 1374[PLAINTIFF'S EXHIBIT A-34

C. & P. TEL. CO. OF B. C.

v.

WEST et al.

U. S. Dist. Ct. Eq. No. 2240

Witness: Sloan

Date: 3-22-34. Rec. p. 1191

The Chesapeake and Potomac Telephone Company of Baltimore City

Per Cent Condition of Physical Property as of December 31, 1932, and as of December 31, 1933

(Exclusive of Land and Buildings)

	Per cent condition December 31, 1932	Per cent condition December 31, 1933
Right of Way	100	100
Central Office Telephone Equipment—		
Manual	89	88
" " " —		
Dial	93	92.5
Other Equipment of Central Offices	85	85
Stations Equipment—All except Multiple P.B.X.'s	85	85

	Per cent condition December 31, 1932	Per cent condition December 31, 1933
Station Equipment—Multiple P.B.X.'s	90	90
Pole Lines	77.5	75.5
Aerial Cable	85	85
Aerial Wire	85	85
Underground Conduit	85	85
Underground and Submarine Cable	90	89
General Equipment	70	70

PLAINTIFF'S EXHIBIT A-35

C. & P. TEL. CO. OF B. C. v. WEST et al. U. S. Dist. Ct. Eq. No. 2240

Witness: Sloan

Date: 3-22-34. Rec. p. 1213

The Chesapeake and Potomac Telephone Company of Baltimore City

Taxes During Construction—December 31, 1932

Period	Cumulative cost of construction before taxes during construction	Cumulative cost of plant cut into service	Cumulative cost of plant less plant cut into service	Cumulative cost of plant substantially complete but not cut into service subject to taxes during construction	Taxes during construction
1st quarter	$150,000				
2nd "	375,000				
3rd "	650,000				
4th "	1,664,000		1,664,000	200,000	
5th "	3,319,396				
6th "	5,455,396				
7th "	7,846,396				4,000
8th "	14,675,396		14,675,396	4,903,252	
9th "	18,954,396				23,408
10th "	23,335,396				
11th "	27,478,381	16,334,777			98,065
12th "	31,146,381	19,234,867	11,911,514	3,970,505	
13th "	33,693,381	23,359,786			
14th "	35,677,737	25,270,036			
15th "	37,134,737	28,542,190			79,410
16th "	38,357,737	29,707,790	8,649,947	2,883,316	
17th "	39,392,237	32,604,076			
18th "	40,273,737	33,483,401			
19th "	40,997,237	36,246,363			57,666
20th "	41,613,737	38,947,375	2,666,362	888,787	
21st "	42,132,638	41,613,737			
22nd "	42,561,638	42,132,638			
23rd "	42,938,638	42,561,638			17,776
24th "	43,299,321	42,938,638	360,683	120,228	2,405
Total taxes during construction					$282,730

[fol. 1376]

The Chesapeake and Potomac Telephone Company of Baltimore City

Interest During Construction—December 31, 1932

Period	Cumulative cost of plant less interest during construction	Cumulative cost of plant cut into service less interest	Cumulative cost of plant bearing interest during construction	Interest during construction at annual rate of 6%
1st quarter ..	$150,000	.....	$150,000	$2,250
2nd " ..	375,000	.....	375,000	5,625
3rd " ..	650,000	.....	650,000	9,750
4th " ..	1,666,500	.....	1,666,500	24,998
5th " ..	3,329,396	.....	3,329,396	49,941
6th " ..	5,477,896	.....	5,477,896	82,168
7th " ..	7,887,896	.....	7,887,896	118,318
8th " ..	14,734,396	.....	14,734,396	221,016
9th " ..	19,056,804	.....	19,056,804	285,852
10th " ..	23,462,804	.....	23,462,804	351,942
11th " ..	27,728,854	16,423,963	11,304,891	169,573
12th " ..	31,421,854	19,410,198	12,011,656	180,175
13th " ..	33,988,854	23,566,390	10,422,464	156,337
14th " ..	35,993,210	25,491,640	10,501,570	157,524
15th " ..	37,544,620	28,794,568	8,750,052	131,251
16th " ..	38,777,620	30,035,696	8,741,924	131,129
17th " ..	39,822,120	32,960,977	6,861,143	102,917
18th " ..	40,711,120	33,848,802	6,862,318	102,935
19th " ..	41,498,286	36,640,008	4,858,278	72,874
20th " ..	42,120,786	39,423,372	2,697,414	40,461
21st " ..	42,644,687	42,120,786	523,901	7,859
22nd " ..	43,078,687	42,644,687	434,000	6,510
23rd " ..	43,477,463	43,078,687	398,776	5,982
24th " ..	43,842,353	43,477,463	364,890	5,473
25th " ..	43,842,353	43,842,353	.....	.....
			$161,523,969	$2,422,860

(Here follow photolithographs of side folios 1377 and 1378.)

THE CHESAPEAKE AND POTOMAC TELEPHONE COMPANY OF BALTIMORE CITY

Amount of Construction Undertaken During Each Quarter of Reproduction Period
December 31, 1932

Account	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	5th Quarter	6th Quarter	7th Quarter	8th Quarter	9th Quarter	10th Quarter	11t Quart
Land in Baltimore	$ -	$ -	$ -	$ 200,000	$ 103,820	$ -	$ -	$ -	$ -	$ -	$ -
Buildings	-	-	-	200,000	350,000	650,000	700,000	200,000	150,000	100,000	4
Central Office Telephone Equipment	-	-	-	-	-	-	-	4,500,000	1,400,000	1,100,000	90
Station Equipment	-	-	-	-	-	-	-	-	500,000	750,000	90
Pole Lines	-	-	-	100,000	200,000	250,000	300,000	400,000	400,000	500,000	50
Aerial Cable	-	-	-	-	80,000	100,000	150,000	250,000	350,000	500,000	50
Aerial Wire	-	-	-	-	75,000	80,000	100,000	150,000	150,000	200,000	20
Underground Conduit	-	-	-	200,000	400,000	800,000	500,000	600,000	600,000	400,000	30
Underground and Submarine Cable	-	-	-	-	200,000	250,000	300,000	350,000	400,000	500,000	50
	$ -	$ -	$ -	$ 700,000	$1,128,820	$1,800,000	$2,050,000	$6,450,000	$3,950,000	$4,050,000	$3,84
Contingencies	-	-	-	14,000	26,576	36,000	41,000	129,000	79,000	81,000	7
	$ -	$ -	$ -	$ 714,000	$1,355,396	$1,836,000	$2,091,000	$6,579,000	$4,029,000	$4,131,000	$3,91
Engineering	100,000	150,000	200,000	200,000	200,000	200,000	200,000	150,000	150,000	150,000	15
Administrative and Legal	50,000	75,000	75,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	7
	$150,000	$225,000	$275,000	$1,014,000	$1,655,396	$2,136,000	$2,391,000	$6,829,000	$4,279,000	$4,381,000	$4,14
Taxes During Construction	-	-	-	-	-	-	4,000	-	23,408	-	9
Insurance During Construction	-	-	-	2,500	7,500	12,500	15,000	17,500	20,000	25,000	2
	$150,000	$225,000	$275,000	$1,016,500	$1,662,896	$2,148,500	$2,410,000	$6,846,500	$4,322,408	$4,406,000	$4,25
Interest During Construction	2,250	5,625	9,750	24,998	49,941	82,168	118,318	221,016	285,852	351,942	16
	$152,250	$230,625	$284,750	$1,041,498	$1,712,837	$2,230,668	$2,528,318	$7,067,516	$4,608,260	$4,757,942	$4,43
Land Outside Baltimore	-	-	-	-	-	132,882	-	-	-	-	-
Right of Way	-	-	-	25,000	50,000	75,000	75,000	100,000	100,000	100,000	7
Other Equipment of Central Office	-	-	-	-	-	-	-	-	100,000	100,000	5
General Equipment	-	-	-	50,000	75,000	100,000	100,000	75,000	75,000	75,000	5
	$ -	$ -	$ -	$ 75,000	$ 125,000	$ 307,882	$ 175,000	$ 175,000	$ 275,000	$ 275,000	$ 17
Total	$152,250	$230,625	$284,750	$1,116,498	$1,837,837	$2,538,550	$2,703,318	$7,242,516	$4,883,260	$5,032,942	$4,61

SLOAN & COOK

Y

n Periqd

r	10th Quarter	11th Quarter	12th Quarter	13th Quarter	14th Quarter	15th Quarter	16th Quarter	17th Quarter	18th Quarter	19th Quarter	20th Quarter	21st Quarter	22nd Quarter	23rd Quarter	24th Quarter	Total
	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 192,616	$ 496,436
000	100,000	41,162	-	-	-	-	-	-	-	-	-	-	-	-	-	2,391,162
000	1,100,000	900,000	800,000	200,000	102,782	-	-	-	-	-	-	-	-	-	-	9,002,782
000	750,000	900,000	800,000	700,000	600,000	400,000	300,000	300,000	250,000	200,000	200,000	200,000	175,000	150,000	33,581	6,458,581
000	500,000	500,000	500,000	400,000	300,000	300,000	250,000	200,000	150,000	100,000	50,000	31,766	-	-	-	4,931,766
000	500,000	500,000	400,000	300,000	250,000	200,000	200,000	150,000	150,000	100,000	100,000	100,000	75,000	75,000	31,703	4,031,703
000	200,000	200,000	150,000	150,000	100,000	100,000	100,000	75,000	75,000	75,000	75,000	50,000	50,000	50,000	26,003	1,951,003
000	400,000	300,000	250,000	200,000	84,822	-	-	-	-	-	-	-	-	-	-	4,034,822
000	500,000	500,000	500,000	400,000	400,000	350,000	300,000	250,000	200,000	200,000	150,000	100,000	100,000	75,000	57,781	5,582,781
000	$4,050,000	$3,841,162	$3,400,000	$2,350,000	$1,837,604	$1,350,000	$1,150,000	$ 975,000	$ 825,000	$ 675,000	$ 575,000	$ 481,766	$ 400,000	$ 350,000	$ 341,684	$36,881,036
000	81,000	76,823	68,000	47,000	35,752	27,000	23,000	19,500	16,500	13,500	11,500	9,635	8,009	7,000	6,835	777,621
000	$4,131,000	$3,917,985	$3,468,000	$2,397,000	$1,874,356	$1,377,000	$1,173,000	$ 994,500	$ 841,500	$ 688,500	$ 586,500	$ 491,401	$ 408,000	$ 357,000	$ 348,519	$39,658,657
000	150,000	150,000	125,000	100,000	75,000	50,000	25,000	25,000	25,000	25,000	20,000	20,000	15,000	15,000	9,519	2,379,519
000	100,000	75,000	75,000	50,000	35,000	30,000	25,000	15,000	15,000	10,000	10,000	7,500	6,000	6,000	2,648	1,261,145
000	$4,381,000	$4,142,985	$3,668,000	$2,547,000	$1,984,356	$1,457,000	$1,223,000	$1,034,500	$ 881,500	$ 723,500	$ 616,500	$ 518,901	$ 429,000	$ 377,000	$ 360,583	$43,299,321
408	-	98,065	-	-	-	79,410	-	-	-	57,666	-	-	-	17,776	2,405	282,730
000	25,000	25,000	25,000	20,000	20,000	15,000	10,000	10,000	7,500	6,000	6,000	5,000	5,000	4,000	1,802	260,302
408	$4,406,000	$4,266,050	$3,693,000	$2,567,000	$2,004,356	$1,551,410	$1,233,000	$1,044,500	$ 889,000	$ 787,166	$ 622,500	$ 523,901	$ 434,000	$ 398,776	$ 364,890	$43,842,353
152	351,942	169,573	180,175	156,337	157,524	131,251	131,129	102,917	102,935	72,874	40,461	7,859	6,510	5,982	5,473	2,422,860
560	$4,757,942	$4,435,623	$3,873,175	$2,723,337	$2,161,880	$1,682,661	$1,364,129	$1,147,417	$ 991,935	$ 860,040	$ 662,961	$ 531,760	$ 440,510	$ 404,758	$ 370,363	$46,265,213
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	132,882
000	100,000	75,000	75,000	75,000	50,000	50,000	25,000	25,000	25,000	9,220	-	-	-	-	-	934,220
000	100,000	50,000	50,000	7,500	1,391	-	-	-	-	-	-	-	-	-	-	308,891
000	75,000	50,000	40,000	30,000	2,412	-	-	-	-	-	-	-	-	-	-	672,412
000	$ 275,000	$ 175,000	$ 165,000	$ 112,500	$ 53,803	$ 50,000	$ 25,000	$ 25,000	$ 25,000	$ 9,220	$ -	$ -	$ -	$ -	$ -	$ 2,048,405
560	$5,032,942	$4,610,623	$4,038,175	$2,835,837	$2,215,683	$1,732,661	$1,389,129	$1,172,417	$1,016,935	$ 869,260	$ 662,961	$ 531,760	$ 440,510	$ 404,758	$ 370,363	$48,313,618

KLEAN & COOK

THE CHESAPEAKE AND POTOMAC TELEPHONE COMPANY OF BALTIMORE CITY

Cumulative Cost of Construction Undertaken During Each Quarter of Reproduction Period
December 31, 1932

Account	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	5th Quarter	6th Quarter	7th Quarter	8th Quarter	9th Quarter	10th Quarter	11th Quarter
Land in Baltimore	$ -	$ -	$ -	$ 200,000	$ 303,820	$ 303,820	$ 303,820	$ 303,820	$ 303,820	$ 303,820	$ 303,820
Buildings	-	-	-	200,000	550,000	1,200,000	1,900,000	2,100,000	2,250,000	2,350,000	2,391,162
Central Office Telephone Equipment	-	-	-	-	-	-	-	4,500,000	5,900,000	7,000,000	7,900,000
Station Equipment	-	-	-	-	-	-	-	-	800,000	1,250,000	2,150,000
Pole Lines	-	-	-	100,000	300,000	550,000	850,000	1,250,000	1,650,000	2,150,000	2,650,000
Aerial Cable	-	-	-	-	50,000	150,000	300,000	550,000	900,000	1,400,000	1,900,000
Aerial Wire	-	-	-	-	25,000	75,000	175,000	325,000	475,000	675,000	875,000
Underground Conduit	-	-	-	200,000	600,000	1,100,000	1,600,000	2,200,000	3,000,000	3,300,000	3,500,000
Underground and Submarine Cable	-	-	-	-	200,000	450,000	750,000	1,100,000	1,500,000	2,000,000	2,500,000
	$ -	$ -	$ -	$ 700,000	$2,028,820	$3,828,820	$5,878,820	$12,328,820	$16,378,820	$20,328,820	$24,169,982
Contingencies	-	-	-	14,000	40,576	76,576	117,576	245,576	325,576	406,576	483,399
	$ -	$ -	$ -	$ 714,000	$2,069,396	$3,905,396	$5,996,396	$12,575,396	$16,704,396	$20,735,396	$24,653,381
Engineering	100,000	250,000	450,000	650,000	850,000	1,050,000	1,250,000	1,400,000	1,550,000	1,700,000	1,850,000
Administrative and Legal	50,000	125,000	200,000	300,000	400,000	500,000	600,000	700,000	800,000	900,000	975,000
	$ 150,000	$ 375,000	$ 650,000	$1,664,000	$3,319,396	$5,455,396	$7,846,396	$14,675,396	$18,954,396	$23,335,396	$27,478,381
Taxes During Construction	-	-	-	-	-	-	4,000	4,000	27,408	27,408	125,473
Insurance During Construction	-	-	-	2,500	10,000	22,500	37,500	55,000	75,000	100,000	125,000
	$ 150,000	$ 375,000	$ 650,000	$1,666,500	$3,329,396	$5,477,896	$7,887,896	$14,734,396	$19,056,804	$23,462,804	$27,728,854
Interest During Construction	2,250	7,875	17,625	42,623	92,564	174,732	293,050	514,066	799,918	1,151,860	1,321,433
	$ 152,250	$ 382,875	$ 667,625	$1,709,123	$3,421,960	$5,652,628	$8,180,946	$15,248,462	$19,856,722	$24,614,664	$29,050,287
Land Outside Baltimore	-	-	-	-	-	132,882	132,882	132,882	132,882	132,882	132,882
Right of Way	-	-	-	25,000	75,000	150,000	225,000	325,000	425,000	525,000	600,000
Other Equipment of Central Office	-	-	-	-	-	-	-	-	100,000	200,000	250,000
General Equipment	-	-	-	50,000	125,000	225,000	325,000	400,000	475,000	550,000	600,000
	$ -	$ -	$ -	$ 75,000	$ 200,000	$ 507,882	$ 682,882	$ 857,882	$ 1,132,882	$ 1,407,882	$ 1,582,882
	$ 152,250	$ 382,875	$ 667,625	$1,784,123	$3,621,960	$6,160,510	$8,863,828	$16,106,344	$20,989,604	$26,022,546	$30,633,169

SLOAN & COOK

:77

*iction Period

10th Quarter	11th Quarter	12th Quarter	13th Quarter	14th Quarter	15th Quarter	16th Quarter	17th Quarter	18th Quarter	19th Quarter	20th Quarter	21st Quarter	22nd Quarter	23rd Quarter	24th Quarter	Total
$ 303,820	$ 303,820	$ 303,820	$ 303,820	$ 303,820	$ 306,820	$ 303,820	$ 303,820	$ 303,820	$ 303,820	$ 303,820	$ 303,820	$ 303,820	$ 303,820	$ 496,436	$ 496,436
2,350,000	2,391,162	2,391,162	2,391,162	2,391,162	2,391,162	2,391,162	2,391,162	2,391,162	2,391,162	2,391,162	2,391,162	2,391,162	2,391,162	2,391,162	2,391,162
7,000,000	7,900,000	8,700,000	8,900,000	9,002,782	9,002,782	9,002,782	9,002,782	9,002,782	9,002,782	9,002,782	9,002,782	9,002,782	9,002,782	9,002,782	9,002,782
1,350,000	2,150,000	2,950,000	3,650,000	4,250,000	4,650,000	4,950,000	5,250,000	5,500,000	5,700,000	5,900,000	6,100,000	6,275,000	6,425,000	6,456,581	6,456,581
2,150,000	2,650,000	3,150,000	3,500,000	3,850,000	4,150,000	4,400,000	4,600,000	4,750,000	4,850,000	4,900,000	4,931,766	4,931,766	4,931,766	4,931,766	4,931,766
1,400,000	1,900,000	2,300,000	2,600,000	2,850,000	3,050,000	3,250,000	3,400,000	3,550,000	3,650,000	3,750,000	3,850,000	3,925,000	4,000,000	4,031,703	4,031,703
675,000	875,000	1,025,000	1,175,000	1,275,000	1,375,000	1,475,000	1,550,000	1,625,000	1,700,000	1,775,000	1,825,000	1,875,000	1,925,000	1,951,003	1,951,003
3,300,000	3,500,000	3,750,000	3,950,000	4,034,822	4,034,822	4,034,822	4,034,822	4,034,822	4,034,822	4,034,822	4,034,822	4,034,822	4,034,822	4,034,822	4,034,822
2,000,000	2,500,000	3,000,000	3,400,000	3,800,000	4,150,000	4,450,000	4,700,000	4,900,000	5,100,000	5,250,000	5,350,000	5,450,000	5,525,000	5,562,781	5,562,781
$20,328,820	$24,159,982	$27,569,982	$29,919,982	$31,757,586	$33,107,586	$34,257,586	$35,232,588	$36,057,586	$36,732,586	$37,307,586	$37,789,352	$38,189,352	$38,539,352	$38,881,036	$38,881,036
406,576	483,399	551,399	598,399	636,151	662,151	685,151	704,651	721,151	734,651	746,151	755,786	763,786	770,786	777,621	777,621
$20,735,396	$24,643,381	$28,121,381	$30,518,381	$32,392,737	$33,769,737	$34,942,737	$35,937,237	$36,778,737	$37,467,237	$38,053,737	$38,545,138	$38,953,138	$39,310,138	$39,658,657	$39,658,657
1,700,000	1,650,000	1,975,000	2,075,000	2,150,000	2,200,000	2,225,000	2,250,000	2,275,000	2,300,000	2,320,000	2,340,000	2,355,000	2,370,000	2,379,519	2,379,519
900,000	975,000	1,050,000	1,100,000	1,135,000	1,165,000	1,190,000	1,205,000	1,220,000	1,230,000	1,240,000	1,247,500	1,253,500	1,258,500	1,261,145	1,261,145
$23,335,396	$27,478,381	$31,146,381	$33,693,381	$36,677,737	$37,134,737	$38,357,737	$39,392,237	$40,273,737	$40,997,237	$41,613,737	$42,132,638	$42,561,638	$42,958,638	$43,299,321	$43,299,321
27,408	125,473	125,473	125,473	125,473	204,883	204,883	204,883	204,883	262,549	262,549	262,549	262,549	280,325	282,730	730
100,000	125,000	150,000	170,000	190,000	205,000	215,000	225,000	232,500	238,500	244,500	248,500	254,500	256,500	260,302	260,302
$23,462,804	$27,728,854	$31,421,854	$33,988,854	$36,993,210	$37,544,620	$38,777,620	$39,822,120	$40,711,120	$41,498,486	$42,120,786	$42,644,687	$43,076,687	$43,477,463	$43,842,353	$43,842,353
1,151,860	1,321,433	1,501,606	1,657,945	1,815,469	1,946,720	2,077,849	2,180,766	2,283,701	2,356,575	2,397,036	2,404,895	2,411,405	2,417,387	2,422,860	2,422,860
$24,614,664	$29,050,287	$32,923,463	$35,646,799	$37,808,679	$39,491,340	$40,855,469	$42,002,886	$42,994,821	$43,854,861	$44,517,822	$45,049,582	$45,488,092	$45,894,850	$46,265,213	$46,265,213
132,822	132,822	132,822	132,822	132,822	132,822	132,822	132,822	132,822	132,822	132,822	132,822	132,822	132,822	132,822	132,822
525,000	600,000	675,000	750,000	800,000	850,000	875,000	900,000	925,000	934,220	934,220	934,220	934,220	934,220	934,220	934,220
200,000	250,000	300,000	307,500	308,891	308,891	308,891	308,891	308,891	308,891	308,891	308,891	308,891	308,891	308,891	308,891
550,000	600,000	640,000	670,000	672,412	672,412	672,412	672,412	672,412	672,412	672,412	672,412	672,412	672,412	672,412	672,412
$ 1,407,682	$ 1,582,882	$ 1,747,882	$ 1,860,382	$ 1,914,185	$ 1,964,185	$ 1,989,185	$ 2,014,185	$ 2,039,185	$ 2,048,405	$ 2,048,405	$ 2,048,405	$ 2,048,405	$ 2,048,405	$ 2,048,405	$ 2,048,405
$26,022,346	$30,633,169	$34,671,344	$37,507,181	$39,722,864	$41,455,525	$42,844,654	$44,017,071	$45,034,006	$45,903,266	$46,566,227	$47,097,987	$47,538,497	$47,943,255	$48,313,618	$48,313,618

1378

[fol. 1379] PLAINTIFF'S EXHIBIT A-36

C. & P. TEL. CO. OF B. C.

v.

WEST et al.

U. S. Dist. Ct. Eq. No. 2240

Witness: Sloan

Date: 3-23-34. Rec. p. —

The Chesapeake and Potomac Telephone Company of Baltimore City

Estimate of Reproduction Cost of Establishing the Business—December 31, 1932

Carrying charges during the development period on plant cut into service	$4,045,474
Cost of securing subscribers	1,665,272
Training personnel	1,291,832
Development of forms and methods	111,875
Initial directory (one issue only)	52,040
Total	$7,166,493

[fol. 1380]

The Chesapeake and Potomac Telephone Company of Baltimore City

Carrying Charges During Development Period—December 31, 1932

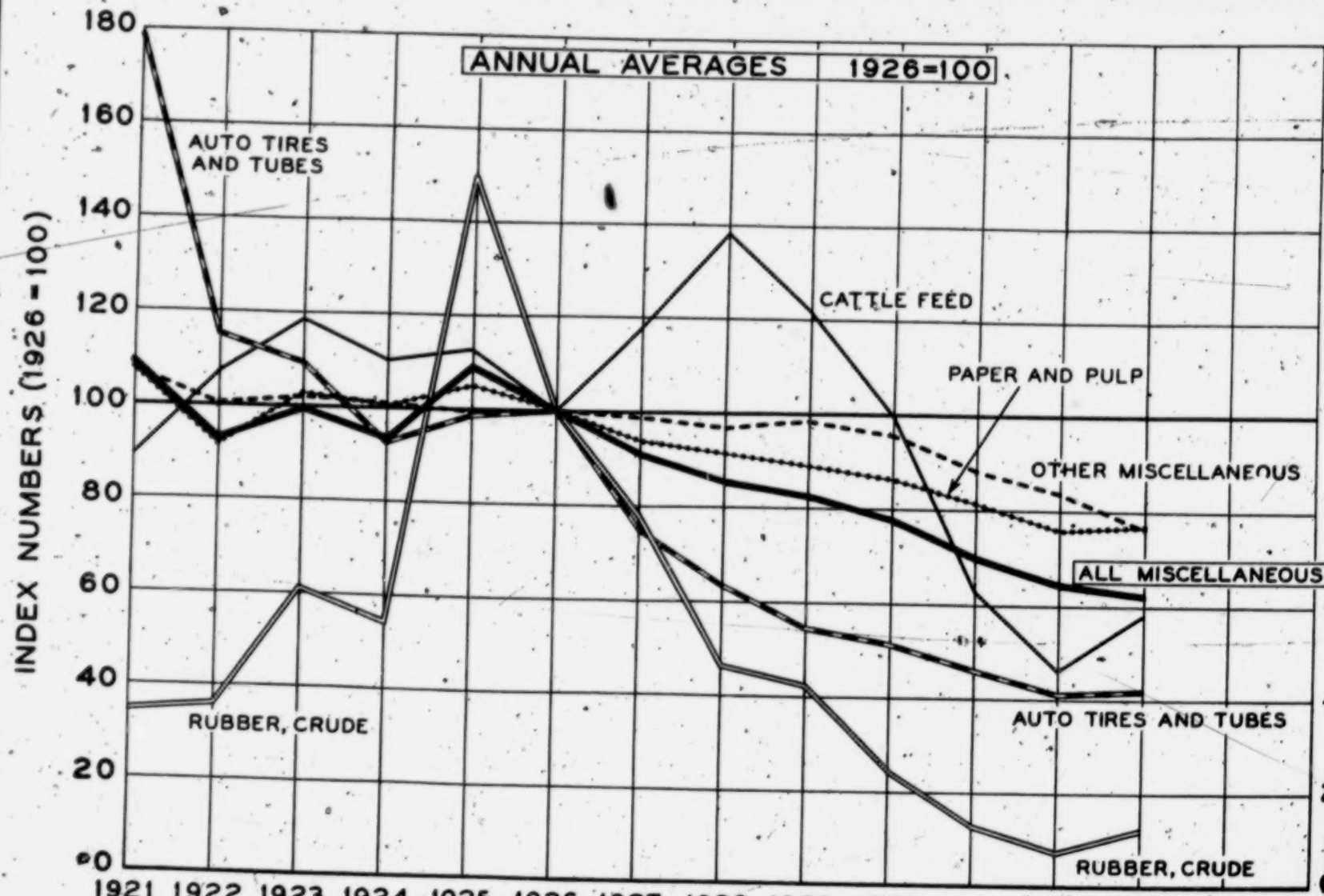
Period	Cumulative cost of plant cut into service including all undistributed construction expenditures	Cumulative cost of plant on which the telephones in service can earn all carrying charges and all operating expenses	Cumulative cost of plant cut into service on which fixed charges must be carried until the total exchange and toll business can be developed
11th quarter	$18,215,782	$6,300,000	$11,915,782
12th "	21,443,218	10,175,000	11,268,218
13th "	26,003,508	14,250,000	11,753,508
14th "	28,130,386	18,525,000	9,605,386
15th "	31,778,291	22,500,000	9,278,291
16th "	33,164,420	25,500,000	7,664,420
17th "	36,417,956	29,212,500	7,205,456
18th "	37,414,510	31,775,000	5,639,510
19th "	40,530,605	34,650,000	5,880,605
20th "	43,608,103	36,750,000	6,858,103
21st "	46,566,227	39,775,000	6,791,227
22nd "	47,097,987	42,680,000	4,417,987
23rd "	47,538,497	45,225,000	2,313,497
24th "	47,943,255	47,398,400	544,855
25th "	48,313,618	48,313,618	.....
	$554,166,363	$453,029,518	$101,136,845

Carrying charges at 16% per annum equals 4% per quarter 4% of $101,136,845 equals $4,045,474.

(Here follows photolithograph of side folio 1381.)

UNITED STATES DEPARTMENT OF LABOR – BUREAU OF LABOR STATISTICS

INDEX NUMBERS OF WHOLESALE PRICES – MISCELLANEOUS GROUP



NO. 840 - SHEET 2
FEBRUARY 13, 1934

1393

C & P. TEL. CO. OF B.C. v. WEST et. al.
U.S. DIST. CT. NO. 2240
Plaintiff's Exhibit A-27
Witness King
D. 3/23/34 P. 1363

[fol. 1382] PLAINTIFF'S EXHIBIT A-38

C. & P. TEL. CO. OF B. C.

v.

WEST et al.

U. S. Dist. Ct. Eq. No. 2240

Witness: Gompf

Date: ——. Rec. p. —.

[fol. 1383]

(1)

The Chesapeake and Potomac Telephone Company of Baltimore City

Average Service Life Study—Detail Forecast Method

Baltimore—Gilmor C. O. Equipment—No. 1 Type

Actual experience				Detail Forecast			
Year	Gross additions	Retirements	Amt. in service Dec. 31	Year	Gross additions	Retirements	Amt. in service Dec. 31
1903	23,838	.....	23,838	1933	2,159	1,080	432,961
1904	12,371	.....	36,209	1934	2,165	1,082	434,044
1905	.....	.....	36,209	1935	2,170	1,085	435,129
1906	41,543	.....	77,752	1936	2,176	1,088	436,217
1907	.....	.....	77,752	1937	2,181	1,091	437,307
1908	90	.....	77,842	1938	51,187	6,093	482,401
1909	207	.....	78,049	1939	2,412	1,206	483,607
1910	2,164	1,122	79,091	1940	2,418	1,209	484,816
1911	202	.....	79,293	1941	2,424	1,212	486,028
1912	2,767	722	81,338	1942	42,430	1,215	527,243
1913	5,029	732	85,635	1943	2,636	1,318	528,561
1914	903	165	86,373	1944	2,643	1,321	529,883
1915	8,072	944	93,501	1945	.....		
1916	16,886	1,195	109,192				
1917	11,595	213	120,574				
1918	2,086	7,654	115,006				
1919	16,991	4,227	127,770				
1920	8,171	.....	135,941				
1921	2,455	275	138,121				
1922	27,138	366	164,893				
1923	17,977	3,307	179,563				
1924	11,694	1,054	190,203				
1925	216,527	42,000	364,730				

1926	13,267	5,147	372,850
1927	25,834	1,955	396,729
1928	15,272	5,645	406,356
1929	1,463	1,346	406,473
1930	2,157	6,741	401,889
1931	15,379	622	416,646
1932	1,379	549	417,276
Adj. 1-1-33	14,606 ×	.8 Yrs.	= 116,848
Total	518,063	86,181	5,493,942

Average Realized Life to 12-31-32 =

$$\frac{5,285,304}{518,063} = 10.20 \text{ Years}$$

Grand Total	635,064	105,181	11,192,139

Average Service Life =

$$\frac{11,192,139}{635,064} = 17.62 \text{ Years}$$

[fol. 1384]

(2)

The Chesapeake and Potomac Telephone Company of Baltimore City

Average Service Life Study—Detail Forecast Method

Baltimore-Gilmor Building—Manual C. O. Type

Actual Experience				Detail Forecast			
Year	Gross additions	Retirements	Amt. in service Dec. 31	Year	Gross additions	Retirements	Amt. in service Dec. 31
1902	8,720		8,720	1933			78,640
1903	1,190		9,910	1934			78,640
1904			9,910	1935	1,180	472	79,348
1905			9,910	1936			79,348
1906	8,237		18,147	1937			79,348
1907			18,147	1938	17,000	3,000	93,348
1908			18,147	1939			93,348
1909			18,147	1940			93,348
1910			18,147	1941	1,400	560	94,188
1911			18,147	1942			94,188
1912			18,147	1943			94,188
1913			18,147	1944			94,188
1914	284		18,431	1945			94,188
1915			18,431	1946			.....
1916			18,431				
1917			18,431				
1918			18,431				
1919			18,431				
1920			18,431				
1921			18,431				

1923				18,431
1924				18,431
1925				18,431
1926	55,767	1,850		72,348
1927				72,348
1928	468			72,816
1929				72,816
1930	309	25		73,100
1931	86			73,186
1932	447	200		73,433
Adj. 1-4-33	.....	.....		73,433
	5,207	× 8 Yrs.	=	41,656
Total	80,715	2,075		1,011,503

Average Realized Live to 12-31-32 =

$$\frac{974,786}{80,715} = 12.08 \text{ Years}$$

Grand Total	100,295	6,107	2,157,811

Average Service Life =

$$\frac{2,157,811}{100,295} = 21.51 \text{ Years}$$

(Here follow photolithographs of side folios 1385, 1386 and 1387.)

FORM C 838

FINAL SUMMARY OF HISTORIC

YEAR OF PLACING	(a) TOTAL AMOUNT OF PLANT PLACED	(b) TOTAL AMOUNT OF PLANT RETIRED	(c) TOTAL AMOUNT OF PLANT STILL IN SERVICE (a)-(b)	N= 0	1	2	3	4	5	6	7	8	9	10	11	12
				XXXX												
1902	61,298	48,832	12,466	XXXX -	61,298 1,088	60,210 1,308	58,902 1,549	57,353 2,490	54,863 4,815	50,048 5,575	44,473 542	43,931 599	43,332 1,195	42,137 754	41,383 3,733	37,650 7,577
1903	33,006	31,526	1,480	XXXX 166	32,840 1,329	31,511 1,295	30,216 4,820	25,396 2,098	23,298 1,668	21,630 1,947	19,683 -	19,683 1,100	18,583 841	17,742 6,967	10,775 4,308	6,467 -
1904	34,991	31,213	3,778	XXXX 2,489	32,502 305	32,197 85	32,112 93	32,019 1,200	30,819 759	30,060 2,116	27,944 1,307	26,637 1,725	24,912 5,231	19,681 7,360	12,321 1,846	10,475 169
1905	37,121	34,698	2,423	XXXX -	37,121 234	36,887 478	36,409 3,135	33,274 828	32,446 1,291	31,155 176	30,979 494	30,485 6,551	23,934 3,082	20,852 2,231	18,621 294	18,327 1,479
1906	40,626	35,987	4,639	XXXX 36	40,590 260	40,330 672	39,658 2,077	37,581 5,481	32,100 1,427	30,673 1,092	29,581 2,363	27,218 7,037	20,181 2,988	17,193 451	15,742 76	16,666 -
1907	57,912	49,003	8,909	XXXX 126	57,786 424	57,362 4,933	52,429 751	51,678 916	50,762 1,778	48,984 4,585	44,399 5,630	38,769 7,751	31,018 750	30,268 415	29,853 644	29,209 2,702
1908	58,317	34,965	23,352	XXXX -	58,317 84	58,233 905	57,328 2,736	54,592 1,572	53,020 3,331	49,689 446	49,243 4,633	44,610 2,371	42,239 415	41,824 464	41,360 2,416	38,944 126
1909	85,668	68,109	17,559	XXXX 268	85,400 119	85,281 -	85,281 2,498	80,783 6,854	73,929 3,411	70,518 4,026	66,492 8,147	58,345 3,619	54,726 364	54,362 1,785	52,577 303	52,274 1,144
1910	45,710	29,137	16,573	XXXX 741	44,969 182	44,787 514	44,273 2,513	41,760 102	41,658 4,672	36,986 1,236	35,750 222	35,528 436	35,092 783	34,309 338	33,971 1,099	32,872 369
1911	52,302	38,363	13,939	XXXX -	52,302 404	51,898 3,171	48,727 2,089	46,638 5,237	41,431 594	40,837 808	40,029 -	40,029 4,844	35,185 119	35,066 1,479	33,587 427	33,160 1,098
1912	78,264	46,942	31,322	XXXX -	78,264 744	77,520 1,644	75,876 1,617	74,259 375	73,884 3,101	70,783 1,646	69,137 1,889	67,448 227	67,221 475	66,746 1,837	64,909 1,821	63,088 13,723
1913	82,615	40,140	42,475	XXXX 635	81,980 1,328	80,652 971	79,681 6,508	73,173 3,356	69,815 107	69,711 85	69,626 438	69,188 1,249	67,939 1,830	66,109 1,326	64,783 2,238	62,545 11,886
1914	86,245	44,686	41,559	XXXX -	86,245 -	86,245 1,195	85,050 272	84,778 208	84,570 1,331	83,239 731	82,508 1,993	80,515 2,443	78,072 3,629	74,443 6,857	67,586 1,270	68,316 7,467
1915	93,365	34,247	59,118	XXXX -	93,365 79	93,286 -	93,286 17	93,269 574	92,695 68	92,627 245	92,382 698	91,684 2,426	89,258 1,668	87,590 13,540	74,050 5,431	68,619 1,459
1916	63,970	14,031	49,939	XXXX -	63,970 -	63,970 -	63,970 -	63,970 60	63,910 -	63,910 1,512	62,398 470	61,928 154	61,774 969	60,805 1,116	59,690 1,461	58,230 2,668
1917	26,309	12,824	13,485	XXXX -	26,309 708	25,601 -	25,601 -	25,601 2,087	23,514 720	22,794 119	22,675 3,979	18,696 638	18,058 2,807	15,251 63	15,188 483	14,705 812
1918	31,851	12,235	19,616	XXXX -	31,851 -	31,851 435	31,416 -	31,416 1,684	29,732 617	29,115 741	28,374 1,108	27,266 4,305	22,961 359	22,602 327	22,275 636	21,639 336
1919	75,678	32,199	43,479	XXXX -	75,678 769	74,909 392	74,517 3,268	71,249 5,798	65,451 6,875	58,576 814	57,762 511	57,251 171	57,080 5,493	51,587 7,835	43,752 254	43,498 19
1920	26,238	8,176	18,062	XXXX -	26,238 -	26,238 126	26,112 1,100	25,012 2,818	22,194 980	21,234 513	20,721 1,268	19,453 835	18,918 599	18,319 218	18,101 39	
1921	32,128	7,524	24,604	XXXX 188	31,962 50	31,912 442	31,470 801	30,869 2,268	28,601 1,427	27,174 404	26,770 263	26,506 1,312	25,196 586	24,610 6		
1922	141,193	23,921	117,272	XXXX -	141,193 300	140,893 365	140,528 2,731	137,797 3,133	134,664 2,756	131,908 2,067	129,841 9,097	120,744 3,260	117,476 204			
1923	146,551	35,463	111,088	XXXX 40	146,491 362	146,129 2,204	143,925 6,889	137,036 11,522	125,514 5,890	119,624 3,771	115,853 4,378	111,475 417				
1924	177,145	25,235	151,910	XXXX 87	177,058 1,780	175,278 2,692	172,586 8,487	164,099 1,706	162,393 4,162	156,231 5,733	150,498 636					
1925	229,236	27,470	201,766	XXXX 1,188	228,048 1,740	226,308 3,692	222,616 2,833	219,783 7,967	211,816 8,808	203,008 1,642						
1926	193,717	14,410	179,307	XXXX 583	193,134 2,261	190,873 3,326	187,547 2,731	184,816 3,364	181,452 2,186							
1927	209,790	8,539	201,251	XXXX 2,588	207,202 921	206,281 1,712	204,569 1,824	202,745 1,494								
1928	201,241	10,199	191,042	XXXX 446	200,795 3,096	197,700 5,063	192,637 1,606									
1929	255,691	21,558	232,363	XXXX 1,882	252,059 2,476	249,583 17,210										
1930	139,807	3,882	135,965	XXXX 1,115	138,155 2,227											
1931	58,976	624	54,552	XXXX 324												
TOTAL	2,848,841	823,588	2,025,253	XXXX 13,069	1,781,200 23,270	1,821,975 54,220	1,854,802 62,614	2,081,246 75,191	1,804,804 62,523	1,582,974 42,030	1,319,178 49,867	1,117,401 53,178	983,188 34,387	801,492 55,368	721,524 38,769	674,69 53,14

UPPER FIGURES: PLANT
LOWER FIGURES: PLANT RETIRED
REMAININ

HISTORICAL DATA FOR MORTALITY STUDY*

PLANT REMAINING IN SERVICE AT BEGINNING OF N^TH CALENDAR YEAR AFTER YEAR OF PLACING
PLANT RETIRED DURING N^TH CALENDAR YEAR AFTER YEAR OF PLACING

11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
41,383	37,650	29,973	29,549	27,320	25,310	25,310	21,538	21,538	21,538	21,538	21,538	21,538	20,709	20,709	16,065	14,051	13,709	12,634	
3,733	7,677	424	2,229	2,010	-	3,772	-	-	-	-	-	829	-	4,644	2,014	342	1,075	168	
10,775	6,467	6,467	5,063	4,947	4,284	4,235	4,235	4,235	3,847	2,927	2,927	2,856	2,410	2,410	1,480	1,480	1,480		
4,308	-	1,404	116	663	49	-	-	388	920	-	71	446	-	930	-	-	-		
12,321	10,475	10,306	5,034	5,034	5,489	5,489	5,489	5,369	5,369	5,369	5,206	4,596	4,596	4,596	4,229	3,917			
1,846	169	2,272	-	2,645	-	-	120	-	-	163	610	-	-	367	312	139			
18,321	18,327	16,848	16,848	15,824	15,824	15,824	15,824	15,244	15,173	15,173	11,170	11,052	5,019	4,266	2,907				
294	1,479	-	1,024	-	-	-	580	71	-	4,003	118	6,033	753	1,359	484				
15,742	16,666	16,666	14,008	13,947	13,917	10,904	10,649	9,870	7,882	5,914	6,499	5,545	5,304	5,023					
76	-	2,658	61	30	3,013	255	779	2,206	746	415	954	241	281	384					
29,853	29,209	26,507	25,364	24,911	21,690	19,608	19,130	18,072	16,381	15,915	14,357	12,969	11,344						
644	2,702	1,143	453	3,221	2,082	478	1,058	1,691	466	1,558	1,386	1,625	2,436						
41,360	38,944	38,818	38,596	36,530	33,930	33,291	32,927	28,684	28,046	26,028	25,421	23,482							
2,416	126	222	2,066	2,600	639	364	4,243	638	2,018	607	1,939	130							
52,577	52,274	51,130	47,231	40,695	34,716	31,581	27,598	26,372	25,034	21,593	18,604								
303	1,144	3,899	6,536	5,979	3,135	3,983	1,226	338	4,441	2,989	1,045								
33,971	32,872	32,513	31,845	31,116	27,527	24,084	22,600	21,900	20,076	19,005									
1,099	359	670	727	3,589	3,443	1,284	900	1,324	1,071	2,432									
35,587	33,160	32,062	31,026	26,424	24,891	17,412	16,774	14,599	13,990										
427	1,098	1,036	4,602	1,533	7,479	638	2,175	609	51										
64,909	63,088	49,365	45,647	43,667	41,719	39,887	36,910	34,794											
1,821	13,723	3,718	1,980	1,948	2,052	2,757	2,116	3,472											
54,783	52,546	50,659	47,894	47,433	46,988	46,072	43,781												
2,238	11,886	2,765	461	445	916	2,291	1,306												
67,586	56,316	58,849	56,223	49,840	47,936	41,855													
1,270	7,467	2,626	6,383	1,905	6,080	296													
74,050	68,619	67,160	56,304	60,456	59,496														
5,431	1,459	256	6,449	960	377														
59,690	58,239	55,551	53,942	50,526															
1,451	2,688	1,609	3,416	587															
15,188	14,705	13,893	13,826																
483	812	67	341																
22,275	21,639	21,303																	
636	336	1,687																	
43,752	43,498																		
254	19																		
15,101																			
39																			
721,524	674,695	578,070	531,998	491,669	403,718	315,332	257,655	200,677	158,118	134,482	105,722	82,038	49,382	37,004	24,681	19,448	15,189	12,634	
18,769	53,144	26,456	36,844	28,015	29,265	16,118	14,603	11,239	9,715	12,167	6,125	9,304	3,469	7,684	2,810	481	1,075	168	

THE CHESAPEAKE AND POTOMAC TELEPHONE COMPANY
COMPANY
OF BALTIMORE CITY

TERRITORIAL DIVISION

CLASS OF PLANT: EXCHANGE AERIAL CABLE

FIGURES REPRESENT: [redacted] QUANTITY UNITS EXPRESSED IN DOLLARS

1932
DATE COMPILED

* FINAL CUT LINES NOT USED

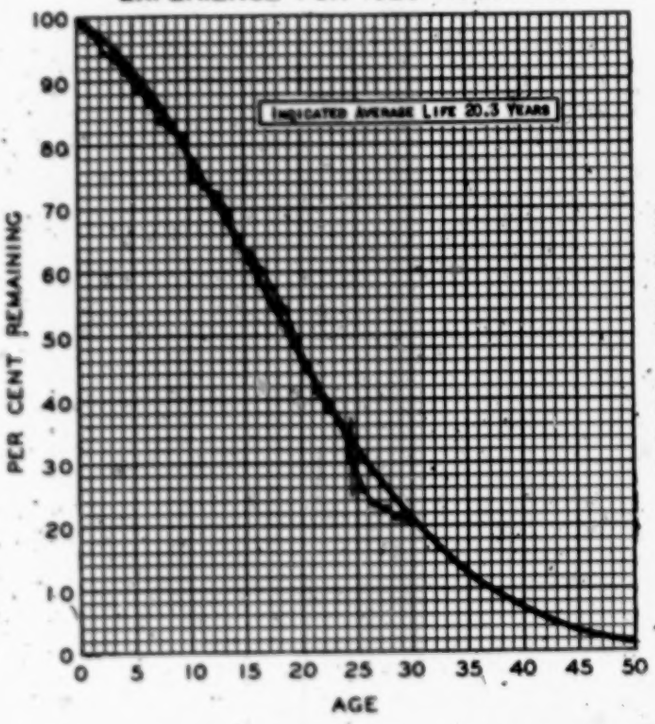
THE CHESAPEAKE AND POTOMAC TELEPHONE COMPANY OF BALTIMORE CITY

GRADUATED LIFE TABLES

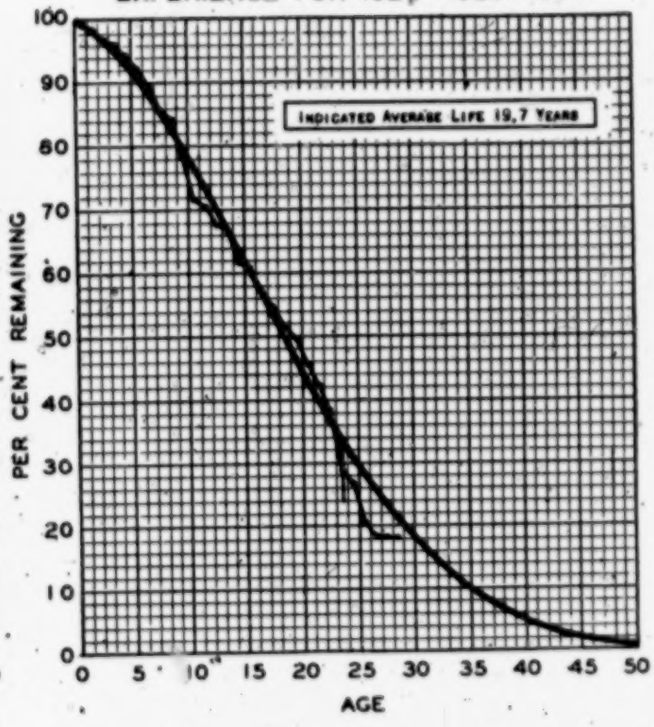
DERIVED FROM "FINAL SUMMARY OF HISTORICAL DATA FOR MORTALITY STUDY"

EXCHANGE AERIAL CABLE

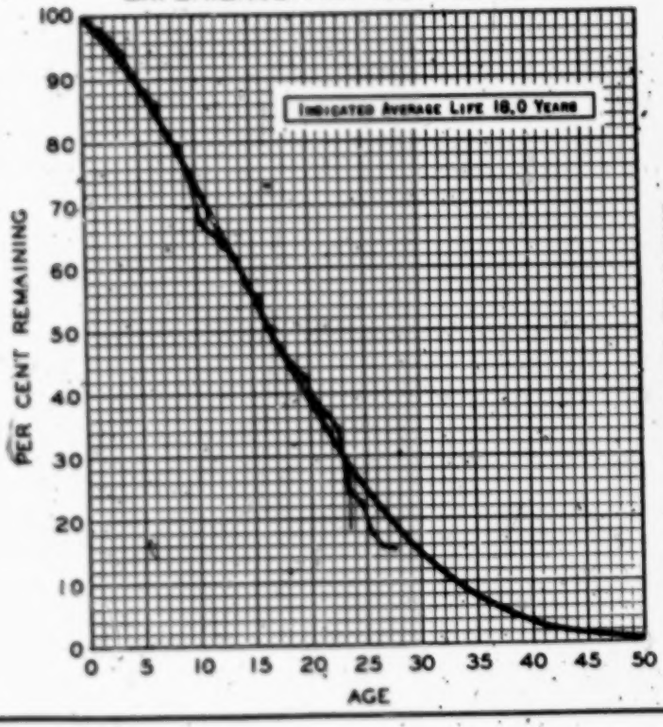
EXPERIENCE FOR 1929-1930-1931



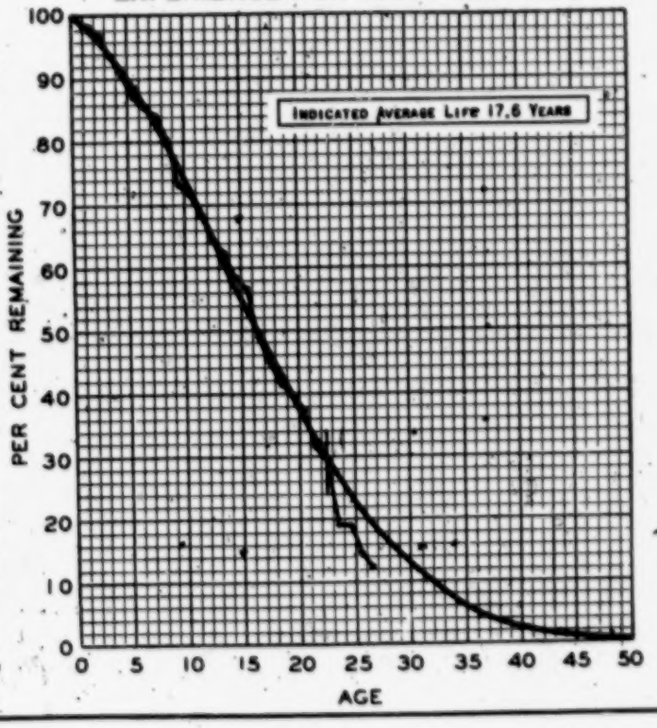
EXPERIENCE FOR 1928-1929-1930



EXPERIENCE FOR 1927-1928-1929



EXPERIENCE FOR 1926-1927-1928



274B

PLAINTIFF'S EXHIBIT No. A-38—Continued

THE CHESAPEAKE AND POTOMAC TELEPHONE COMPANY OF BALTIMORE CITY

DETERMINATION OF AVERAGE SERVICE LIFE EXPERIENCE BY TURNOVER METHOD

STATION APPARATUS

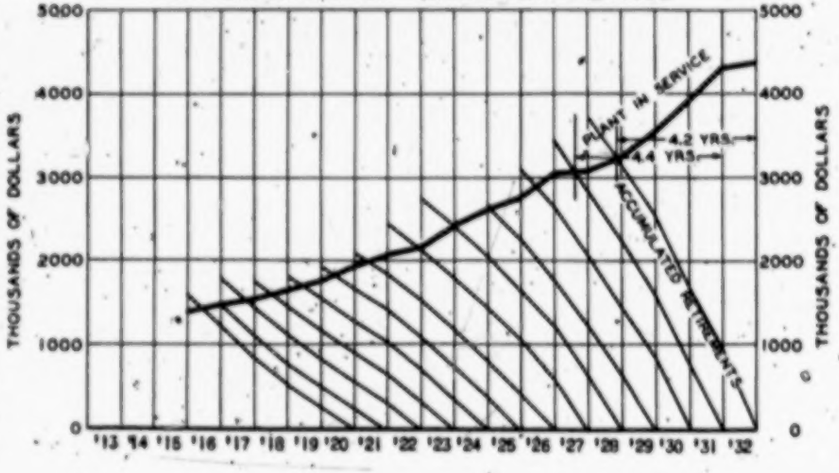
ADJUSTED ACCOUNTING DATA

YEAR	PLANT IN SERVICE AT BEGINNING OF YEAR	PLANT RETIRED	
		DURING YEAR	ACCUMULATED FROM 1932
1913			
1914			
1915			
1916	1,399,220	383,247	
1917	1,455,782	384,525	
1918	1,527,733	297,806	
1919	1,614,305	272,251	
1920	1,755,632	263,449	
1921	1,909,241	240,882	
1922	2,090,919	327,853	
1923	2,199,834	341,215	
1924	2,436,553	362,009	
1925	2,610,982	395,588	
1926	2,762,880	432,791	
1927	3,077,419	609,855	
1928	3,094,594	621,461	3,759,499
1929	3,246,773	600,433	3,138,038
1930	3,549,636	850,071	2,537,605
1931	3,939,500	775,680	1,687,534
1932	4,306,694	911,854	911,854
1933	4,383,855		

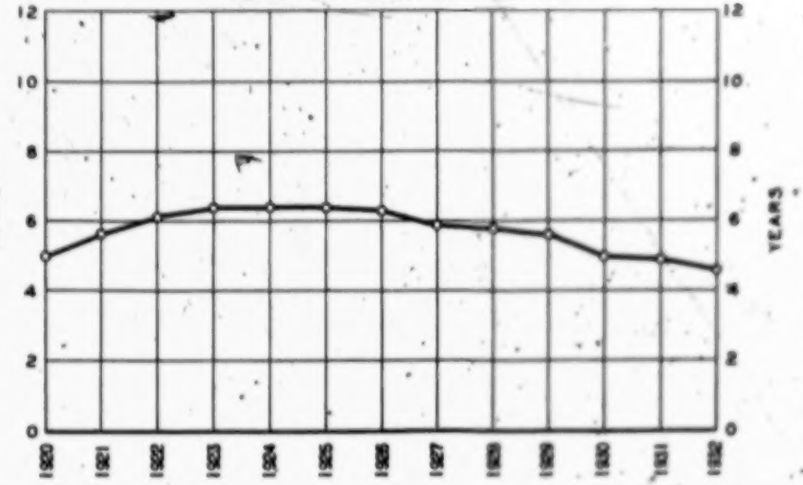
SUMMARY OF RESULTS

END OF TURNOVER PERIOD	INDICATED TURNOVER PERIOD (YEARS)	ADJUSTMENT FOR GROWTH (YEARS)	ADJUSTED TURNOVER PERIOD (YEARS)
1920	4.5	.5	5.0
1921	5.0	.6	5.6
1922	5.3	.8	6.1
1923	5.5	.9	6.4
1924	5.5	.9	6.4
1925	5.6	.8	6.4
1926	5.5	.8	6.3
1927	5.1	.8	5.9
1928	5.1	.7	5.8
1929	4.9	.7	5.6
1930	4.5	.5	5.0
1931	4.4	.5	4.9
1932	4.2	.4	4.6

APPLICATION OF TURNOVER METHOD



TREND OF AVERAGE LIFE



1387

5

[fol. 1388] PLAINTIFF'S EXHIBIT A-39

C. & P. TEL. CO. OF B. C.

v.

WEST et al.

U. S. Dist. Ct. Eq. No. 2240

Witness: Gompf

Date: ——. Rec. —

[fol. 1389] (1)

The Chesapeake and Potomac Telephone Company of Baltimore City

Schedule of Rates for Annual Depreciation Charges—Effective April 1, 1933

Acct. No.	Class of property	Estimated average service life (Years)	Estimated average net salv. percentage (%)	Rate for annual deprec'n charge (%)
207	Right of Way—			
	Exchange	40	0	2.5
	Toll	50	0	2.0
	Composite*	..	..	2.3
212	Buildings—			
	Manual Exch. and Other	27	15	3.1
	Dial Exchange	45	10	2.0
	Composite*	..	..	2.8
221	C. O. Equipment—			
	Manual	17	4	5.6
	Dial	22	0	4.5
	Composite*	..	..	5.3
231	Station Apparatus	5	65	7.0
234	Private Branch Exchanges—			
	Multiple Type	12	10	7.5
	Non-Mult. Type	7	40	8.6
	Composite*	..	..	8.2
235	Booths and Spec. Fitt.	8	60	5.0
241	Pole Lines—			
	Exchange	18	−10	6.1
	Toll	22	−8	4.9
	Composite*	..	..	5.8
242	Cable—			
	Exchange Aerial	22	8	4.2
	Exchange U. G. Main	35	15	2.4
	Exchange U. G. Subsid.	20	−3	5.1
	Toll Aerial	30	15	2.8
	Toll Underground	35	15	2.4
	Submarine (Exch. and Toll)	20	0	5.0
	Composite*	..	..	3.5
243	Aerial Wire—			
	Exchange	16	−10	8.4†
	Toll	22	20	5.1†
	Composite*	..	..	7.0†
244	Underground Conduit—			
	Exchange	50	0	2.0
	Toll	60	0	1.7
	Composite*	..	..	2.0
261	Furn. and Offc. Equipt.	12	20	6.7
264	Vehicles and Other Work Equipt.—			
	Group 1 Vehicles (Fords)	3.5	12	25.1
	Group 3 Vehicles (Others)	6	5	15.8
	Other Work Equipment	5	20	16.0
	Composite*	..	..	19.0

* Based on plant in service January 1, 1933.

† Includes allowance of 1.5% per year for depreciation of temporary facilities.

(Here follow photolithographs of side folios 1390, 1391 and 1392.)

PLAINTIFF'S EXHIBIT No. A-39—Continued

THE CHESAPEAKE AND POTOMAC TELEPHONE COMPANY OF BALTIMORE CITY

SUMMARY OF AVERAGE SERVICE LIFE STUDIES FOR BUILDINGS

1 Location	2 Year Built or Acquired	3 Initial Cost Plus Gross Additions to 12-31-32	4 Dollar Years to 12-31-32	5 Average Realized Life to 12-31-32 Col.4÷3	6 Age From Initial Construction to 12-31-32	7 Estimated Year of Retirement	8 Overall Life to Retirement Col.7-2	9 Initial Cost Plus Gross Additions to Retirement	10 Total Dollar Years to Retirement	11 Average Service Life Col.10÷9	12 Book Cost as of 1-1-33	13 Present Annual Weight Col.12÷11
MANUAL C. O. BUILDINGS												
Aberdeen	1918	$5,897	$46,511	11.86	14.5	1966	48	$4,209	$179,975	42.76	$5,897	$91
Annapolis	1906	18,681	437,176	23.46	26.5	1958	52	16,817	539,448	28.67	18,606	649
Arbutus	1927	20,868	110,845	5.31	5.5	1966	39	30,699	900,020	29.32	20,716	707
Baltimore-Curtis	1930	52,233	129,976	2.49	2.5	1947	17	53,931	894,770	16.59	52,233	3,148
-Gilmor	1902	80,715	974,786	12.08	30.5	1946	44	100,295	2,157,811	21.51	78,640	3,656
-Madison	1899	76,329	1,771,789	23.21	33.5	1944	45	78,228	2,650,609	33.88	75,879	2,240
-Plaza	1906	892,461	15,762,422	17.66	27.5	1945	40	917,514	26,293,806	28.66	885,112	29,139
-South	1900	13,627	233,201	17.11	32.5	1941	41	13,827	329,845	23.86	11,422	479
-Vernon	1903	93,790	2,456,814	26.19	29.5	1942	39	95,625	3,333,193	34.86	91,738	2,632
-Wolfe	1905	203,385	2,843,950	13.98	27.5	1945	41	208,825	5,336,062	25.56	197,825	7,743
Belair	1901	11,830	181,134	15.32	31.5	1952	51	12,316	398,915	32.39	11,020	340
Bradley-Wisconsin	1927	65,494	354,342	5.41	5.5	1961	34	119,169	2,034,715	17.07	65,494	3,837
Cambridge	1912	18,812	344,063	18.29	20.5	1951	39	19,299	690,651	35.79	18,512	517
Centreville	1910	4,485	67,079	14.96	22.5	1961	51	4,784	195,783	40.92	4,425	108
Cumberland	1902	45,390	857,511	19.76	30.5	1951	49	45,224	1,665,515	36.83	43,156	1,172
Darlington	1918	1,870	17,282	10.99	14.5	1944	26	1,809	35,445	22.03	1,870	71
Denton	1914	12,041	204,206	16.96	18.5	1941	27	12,252	307,031	25.06	12,041	480
Dundalk-Riverside	1930	55,537	133,402	2.49	2.5	1962	32	81,757	1,969,331	24.09	55,537	2,222
Easton	1917	18,140	303,794	11.23	15.5	1955	38	19,076	610,958	32.03	17,825	557
Elkridge	1911	1,641	17,670	10.77	21.5	1968	57	1,776	75,611	42.57	1,691	37
Elkton	1907	8,549	128,441	15.02	25.5	1967	60	18,469	530,250	28.71	8,189	284
Frederick	1908	20,414	439,322	21.52	24.5	1950	42	56,087	1,207,460	21.53	20,414	948
Hagerstown	1905	47,535	833,327	17.53	27.5	1963	48	102,569	2,423,638	23.63	47,155	1,995
Hillsboro	1914	1,166	17,188	14.74	18.5	1966	52	1,256	55,869	44.48	1,128	25
Pikesville	1908	7,340	155,204	21.14	24.5	1951	43	17,834	383,335	21.49	7,340	342
Ridgely	1914	3,686	62,562	16.92	18.5	1966	52	3,961	188,972	47.42	3,686	78
Shepherd-Silver Spring	1927	54,264	290,405	5.35	5.5	1951	24	97,683	1,831,887	18.75	54,254	2,894
Sykesville	1917	8,377	114,958	13.72	15.5	1960	43	8,922	349,999	39.23	8,377	214
Towson	1907	11,769	191,747	16.29	25.5	1939	32	11,907	263,457	22.13	11,064	500
Westminster	1910	11,069	133,310	12.04	22.5	1951	41	11,536	339,236	29.41	10,994	374
Wilna	1908	1,671	35,651	21.32	24.5	1939	31	1,692	46,499	27.48	1,671	61
Total Manual C.O. Bldgs.		1,862,406	29,849,586	16.67	20.5		40.2			26.49*	1,789,463	67,540
108 E. Lexington St. & Misc.										25.00	225,919	9,037
Total Man. & Misc. Bldgs.										26.32*	2,015,382	76,577
DIAL C. O. BUILDINGS												
Baltimore-Lafayette	1925	209,852	1,557,366	7.42	7.5						209,852	
-Liberty	1920	246,886	2,951,443	11.95	12.5						238,061	
-University	1915	296,881	2,296,912	7.74	17.5						277,362	
Hyattsville	1929	224,004	677,945	3.03	3.5						223,989	
Salisbury	1912	77,900	487,779	6.26	20.5						74,299	
Total Dial C.O. Bldgs.		1,055,323	7,971,445	7.55	12.5					45.00/	1,023,563	22,748

* Composite obtained by reciprocal weighting = Col. 12÷13
/ Based on overall consideration of group of buildings.

March 28, 1933.

1390

PLAINTIFF'S EXHIBIT No. A-39—Continued

THE CHESAPEAKE AND POTOMAC TELEPHONE COMPANY OF BALTIMORE CITY

SUMMARY OF AVERAGE SERVICE LIFE STUDIES FOR CENTRAL OFFICE EQUIPMENT

1 Office	2 Year of Initial Installation or Purchase	3 Initial Cost Plus Gross Additions to 12-31-32	4 Dollar Years to 12-31-32	5 Average Realized Life to 12-31-32 Col. 4÷3	6 Age From Initial Construction As 12-31-32	7 Estimated Year of Retirement	8 Overall Life to Retirement Col. 7-2	9 Initial Cost Plus Gross Additions to Retirement	10 Total Dollar Years to Retirement	11 Average Service Life Col. 10÷9	12 Book Cost as of 1-1-33	13 Present Annual Weight Col. 12÷11
MANUAL OFFICES												
No. 1 Type												
Baltimore-Gilmor	1903	$ 518,063	$ 5,295,304	10.20	29.5	1945	42	$ 635,064	$11,192,139	17.62	$ 431,862	$ 24,511
Madison	1907	720,338	9,415,300	13.07	25.5	1943	36	761,137	15,886,182	21.15	609,098	28,799
Plaza-Calvert-Toll	1905	2,527,804	26,811,026	10.61	27.5	1940	35	2,838,467	43,320,941	15.42	2,176,683	132,563
South	1904	210,641	2,044,198	12.58	28.5	1940	36	217,032	4,014,019	18.49	181,452	9,812
Tuxedo	1908	317,280	2,978,380	9.39	24.5	1938	30	332,128	4,846,107	13.99	296,782	21,212
Vernon	1903	747,841	10,129,672	13.55	29.5	1941	38	783,662	15,942,419	20.34	674,947	33,183
Wolfe-Broadway	1905	932,397	9,292,750	11.16	27.5	1944	39	970,948	18,475,993	19.03	757,209	39,790
Cumberland	1912	268,930	2,533,697	9.86	20.5	1950	38	300,582	6,788,178	22.53	227,281	10,088
Hagerstown	1914	290,590	2,181,667	8.71	18.5	1952	38	320,588	6,906,136	21.54	220,348	10,230
Pikesville	1908	63,513	641,728	10.10	24.5	1950	42	92,042	1,830,748	19.89	57,653	2,899
Total		$6,445,077	$71,913,692	11.16	25.6		37.4			*17.99	$5,635,286	$313,087
Other Common Battery Types												
Annapolis	1906	$ 72,255	$ 892,780	9.59	26.5	1937	31	$ 77,404	$ 978,550	12.62	$ 61,214	$ 4,851
Arbutus	1927	37,198	197,099	5.30	5.5	1965	38	94,292	2,124,471	22.53	36,249	1,609
Baltimore-Curtis	1930	89,072	146,772	2.48	2.5	1946	16	75,982	1,064,272	13.36	58,748	4,401
Forest	1922	496,183	3,063,424	6.15	10.5	1939	17	509,029	5,839,928	11.47	426,176	37,156
Hamilton	1922	319,230	2,315,592	7.25	10.5	1940	18	375,025	4,689,783	12.43	289,098	23,258
Belair	1911	24,992	318,283	12.62	21.5	1951	40	36,363	829,985	22.82	22,752	997
Boulevard	1932	32,940	16,469	.50	.5	1965	33	83,342	1,838,471	19.66	32,917	1,674
Bradley-Wisconsin	1928	163,186	586,708	3.60	4.5	1950	22	324,135	4,601,800	14.20	150,486	10,598
Cambridge	1912	39,876	549,277	13.77	20.5	1950	38	56,870	1,239,630	21.80	33,796	1,550
Catonsville	1908	68,272	677,258	9.92	27.5	1936	31	69,198	892,124	12.89	61,401	4,763
Chestertown	1914	31,794	310,917	9.78	18.5	1957	45	56,228	1,237,268	22.40	28,237	1,261
Crisfield	1930	19,984	55,314	2.77	2.5	1965	36	31,740	852,903	26.86	19,948	743
Dundalk	1930	89,002	144,089	2.44	2.5	1961	31	111,366	2,311,986	20.76	88,866	2,836
Easton	1918	109,999	309,191	4.63	14.5	1954	36	169,063	3,263,398	19.30	101,824	5,260
Elkridge	1932	6,481	3,225	.50	.5	1967	35	11,829	306,684	25.93	6,481	249
Elkton	1931	35,863	53,744	1.50	1.5	1966	35	37,092	1,075,735	27.56	35,770	1,298
Ellicott City	1915	17,116	203,980	11.92	17.5	1957	42	22,647	630,806	28.46	15,760	554
Frederick	1908	159,087	1,229,230	7.73	24.5	1949	41	202,997	3,525,488	18.85	140,667	7,462
Frostburg	1913	15,046	179,040	11.90	19.5	1956	42	19,344	505,987	26.16	12,688	485
Havre de Grace	1931	46,143	68,357	1.48	1.5	1.50	29	69,344	1,878,445	27.80	46,107	2,022
Hyattsville	1930	113,648	269,845	2.37	2.5	1965	35	241,742	6,037,132	24.97	113,486	4,545
Lonaconing	1913	5,432	63,904	11.76	19.5	1940	27	6,794	98,332	14.47	4,491	255
Pocomoke	1917	20,213	272,185	9.01	15.5	1956	39	73,071	1,292,115	17.68	24,673	1,396
Salisbury	1911	274,811	1,710,816	6.22	21.5	1950	39	372,645	6,511,125	17.47	230,531	13,196
Silver Spring-Shepherd	1927	145,392	589,607	4.06	5.5	1950	23	256,231	4,365,340	16.30	136,906	8,948
Sparrows Point	1923	22,897	171,132	7.47	9.5	1948	25	27,098	723,967	26.72	20,494	767
Sykesville	1919	13,786	168,262	12.20	13.5	1969	40	15,822	421,711	26.61	12,913	384
Towson	1907	78,230	744,908	9.77	25.5	1938	31	80,945	1,134,436	13.99	67,867	4,872
Westminster	1911	26,706	286,221	10.72	21.5	1950	39	33,087	787,028	23.22	26,276	1,069
Central Test Desk and Misc.	1929	5,693	17,230	3.03	3.5	1940	11	8,889	89,169	10.06	**9,614	947
Total		$2,828,446	$16,601,821	6.17	12.37		32.4			*15.29	$2,254,808	$149,436
Magneto Type - 88 Offices										16.00	$ 360,056	$ 22,502
Total Manual C.O. Equipment										*17.07	$5,278,129	$468,033
DIAL OFFICES												
Lafayette	1926	$ 752,633	$ 4,856,833	6.45	6.5						$ 730,853	
Liberty	1923	1,398,819	12,012,370	8.59	9.5						1,387,349	
University-Chesapeake	1926	1,568,823	6,161,179	3.92	6.5						1,538,328	
Total Dial C.O. Equipment		$3,719,775	$23,020,382	6.19	7.5					***.00	$3,668,130	$185,733

* Composite obtained by reciprocal weighting - Col. 12 ÷ 13.
** Includes $3,977 for P.B.X. School at Plaza Central Office.
*** Based on overall consideration of group of offices.

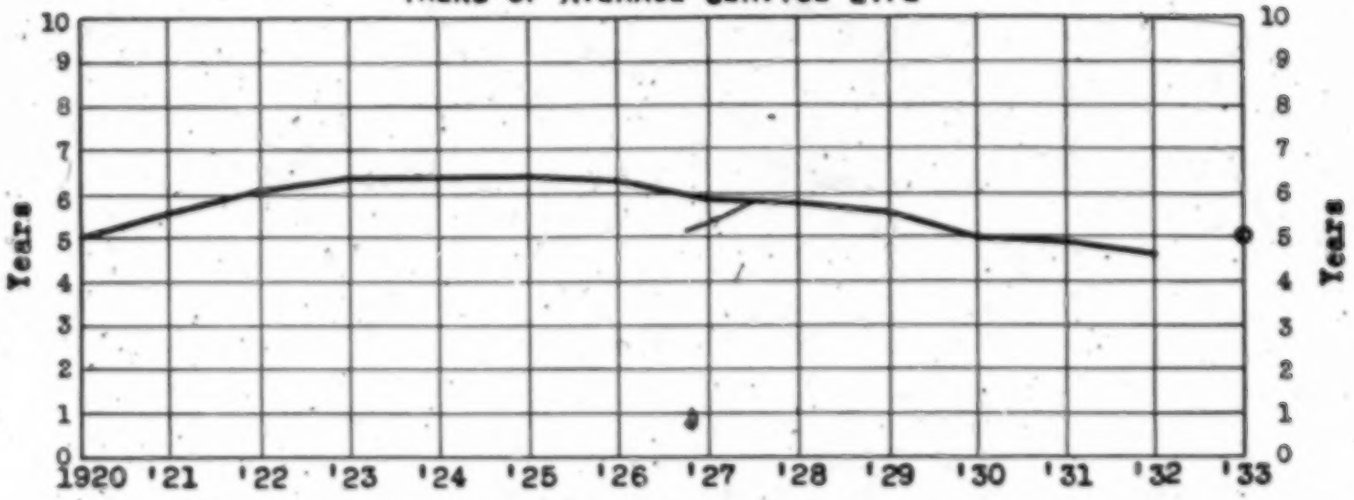
THE CHESAPEAKE AND POTOMAC TELEPHONE COMPANY
OF BALTIMORE CITY

4

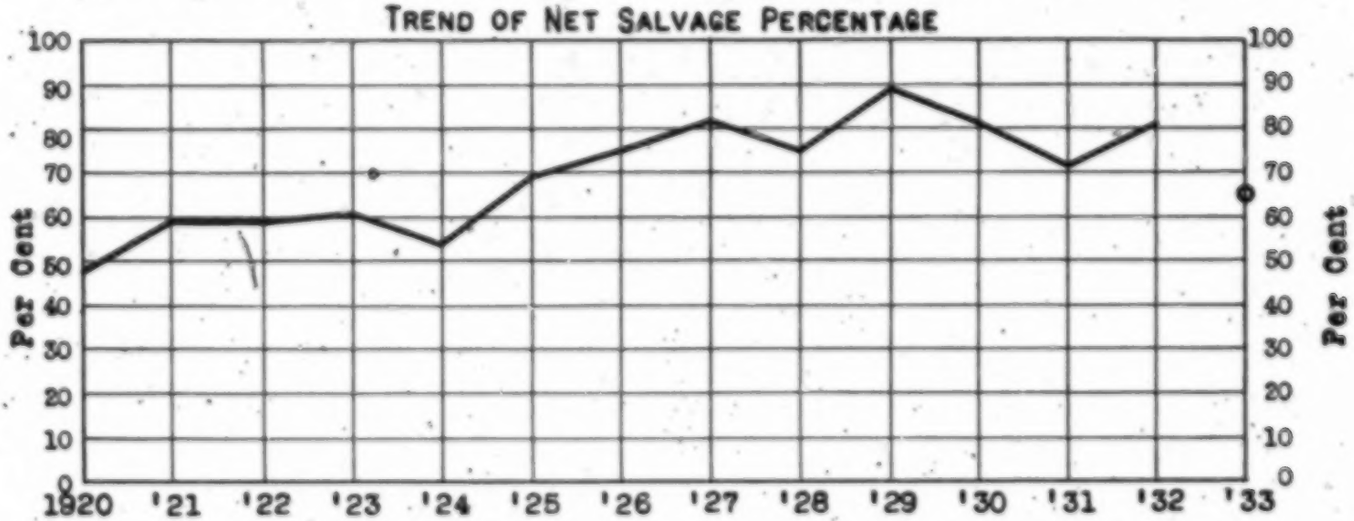
ANALYSIS OF SERVICE LIFE AND NET SALVAGE EXPERIENCE

STATION APPARATUS

TREND OF AVERAGE SERVICE LIFE



TREND OF NET SALVAGE PERCENTAGE



AVERAGE SERVICE LIFE

PERIOD *	AVG. LIFE-YRS.
1920	5.0
1921	5.6
1922	6.1
1923	6.4
1924	6.4
1925	6.4
1926	6.3
1927	5.9
1928	5.8
1929	5.6
1930	5.0
1931	4.9
1932	4.6

NET SALVAGE PERCENTAGE

PERIOD	NET SALVAGE-%
1920	48
1921	59
1922	59
1923	61
1924	54
1925	69
1926	75
1927	82
1928	75
1929	89
1930	81
1931	72
1932	81

*End of turnover period.

1392

9776

The Chesapeake and Potomac Telephone Companies
Summary of Average Service Life Studies for Multiple P.B.X.'s

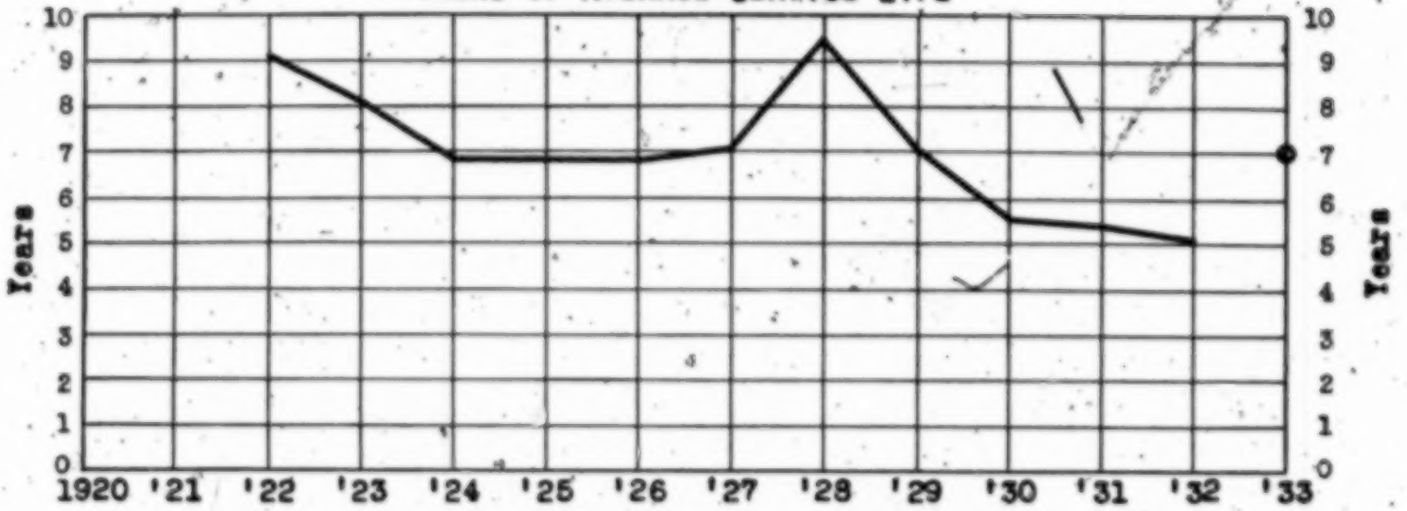
Location	Year installed or purchased	Year retired	Overall life	Initial cost plus gross additions to retirement	Dollar years to retirement	Average service life	Book value at retirement
Washington—							
Interdepartmental	1904	1930	26	$16,238.80	$180,627.19	11.12	$10,765.80
Kann, S. Sons Co.	1914	1930	16	6,886.79	56,825.50	8.25	6,500.00
Lansburgh & Bro.	1925	1930	5	8,793.22	38,587.76	4.39	8,780.00
Official—C. & P.	1917	1930	13	42,463.48	353,113.06	8.32	42,238.48
Shoreham Hotel (Old)	1918	1926	8	7,341.21	55,972.63	7.62	7,341.21
U. S. Capitol (1st Old)	1909	1925	16	31,644.50	330,907.96	10.46	30,884.50
U. S. Capitol (2nd Old)	1925	1933	8	73,276.27	555,007.44	7.57	68,076.95
U. S. Dept. of Agriculture (1st Old)	1921	1924	3	27,212.18	78,773.09	2.89	27,212.18
U. S. Dept. of Agriculture (2nd Old)	1924	1932	8	34,850.85	217,042.18	6.23	31,677.26
U. S. Dept. of Commerce	1923	1932	9	11,261.49	73,596.73	6.54	10,309.19
U. S. Post Office Dept.	1918	1934 (Est.)	16	44,528.82	618,709.39	13.89	41,168.24
U. S. Treasury Dept.	1917	1930	13	45,237.82	349,318.78	7.72	39,290.57
Washington Railway & Electric Co.	1922	1931	9	13,895.84	70,746.13	5.09	7,700.00
Western Union	1919	1929	10	10,640.48	103,513.77	9.73	10,406.67
Willard Hotel	1910	1934 (Est.)	24	15,848.12	153,506.29	9.69	10,543.27
Woodward & Lothrop	1913	1928	15	5,288.78	60,190.47	11.39	5,036.01
Baltimore—							
Bernheimer Bros.	1916	1925	9	5,020.69	28,942.68	5.76	3,513.14
City Hall	1910	1924	14	6,075.00	79,578.00	13.10	5,775.00
Crown Cork and Seal Co.	1921	1926	4	5,749.07	28,649.39	4.98	5,749.07
McCormick & Company	1921	1925	4	10,672.90	33,997.56	3.19	10,672.90
Official—C. & P.	1906	1927	21	15,410.57	142,391.18	9.24	15,281.42
United Railway & Elec. Co.	1920	1929	9	10,387.75	88,466.54	8.52	10,269.05
Western Union	1912	1925	13	5,940.31	30,241.03	5.09	5,918.29
Richmond—							
Jefferson Hotel	1923	1931	8	8,293.02	61,889.05	7.46	6,293.02
Western Union	1913	1926	13	1,858.07	23,743.50	12.78	1,858.07
Norfolk—							
Naval Operating Base	1920	1928	8	11,401.65	89,279.41	7.83	11,048.48
Western Union	1917	1927	10	3,742.86	34,427.60	9.20	3,629.27
Charleston—							
Official—C. & P.	1929	1932	3	7,944.88	23,806.64	3.00	7,930.88
Wheeling—							
Pennsylvania Railroad	1925	1931	6	9,252.83	45,336.51	4.90	8,674.25
Total	....	....	10.7	$497,158.25	$4,007,187.46	8.06	$457,443.17

THE CHESAPEAKE AND POTOMAC TELEPHONE COMPANY
OF BALTIMORE CITY

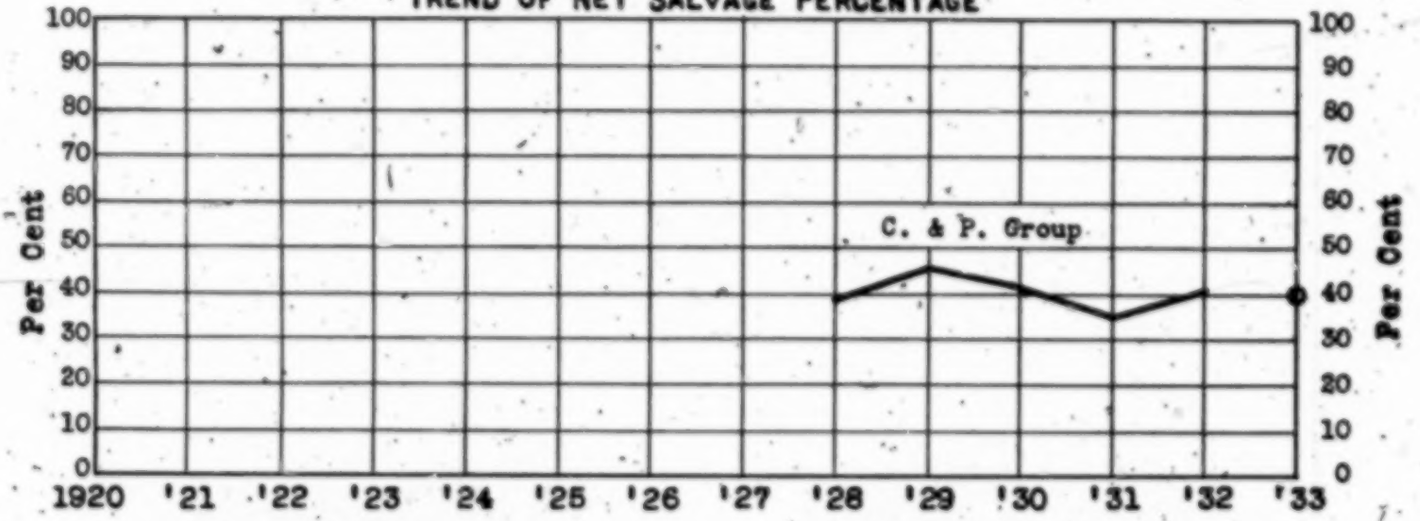
ANALYSIS OF SERVICE LIFE AND NET SALVAGE EXPERIENCE

PRIVATE BRANCH EXCHANGES - NON-MULTIPLE

TREND OF AVERAGE SERVICE LIFE



TREND OF NET SALVAGE PERCENTAGE



AVERAGE SERVICE LIFE

PERIOD	AVG. LIFE-YRS.
1920-1922	9.1
1921-1923	8.1
1922-1924	6.8
1923-1925	6.8
1924-1926	6.8
1925-1927	7.1
1926-1928	9.5
1927-1929	7.0
1928-1930	5.6
1929-1931	5.4
1930-1932	5.1

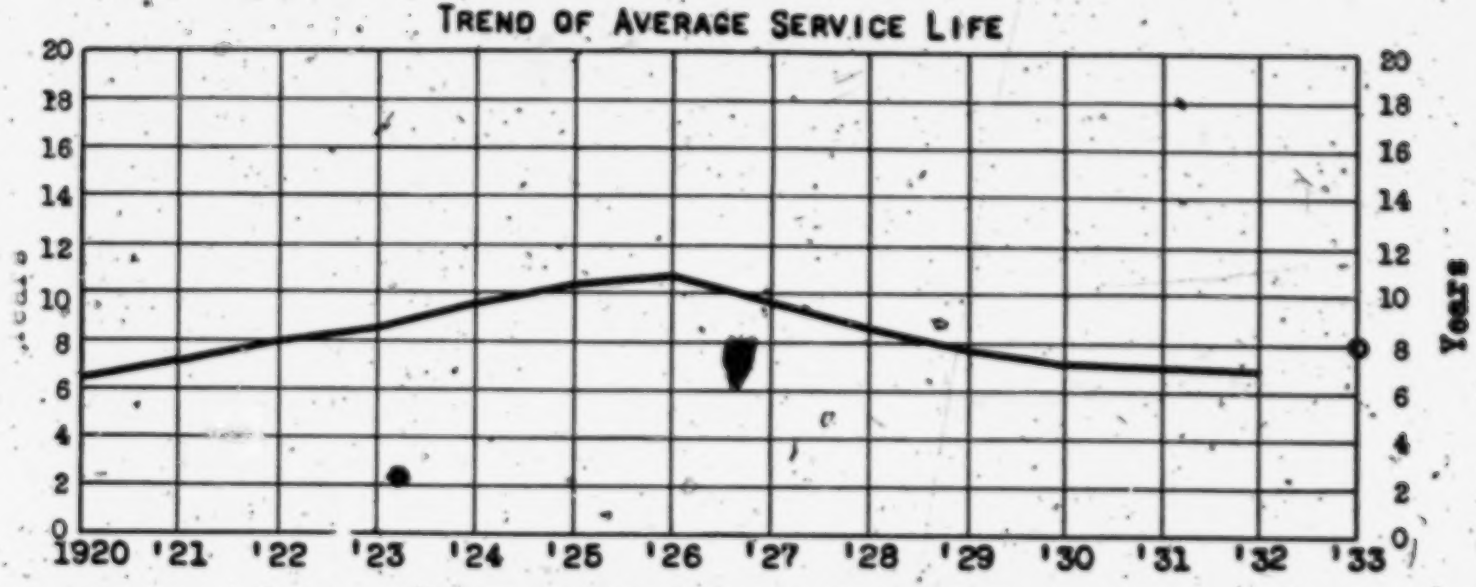
NET SALVAGE PERCENTAGE

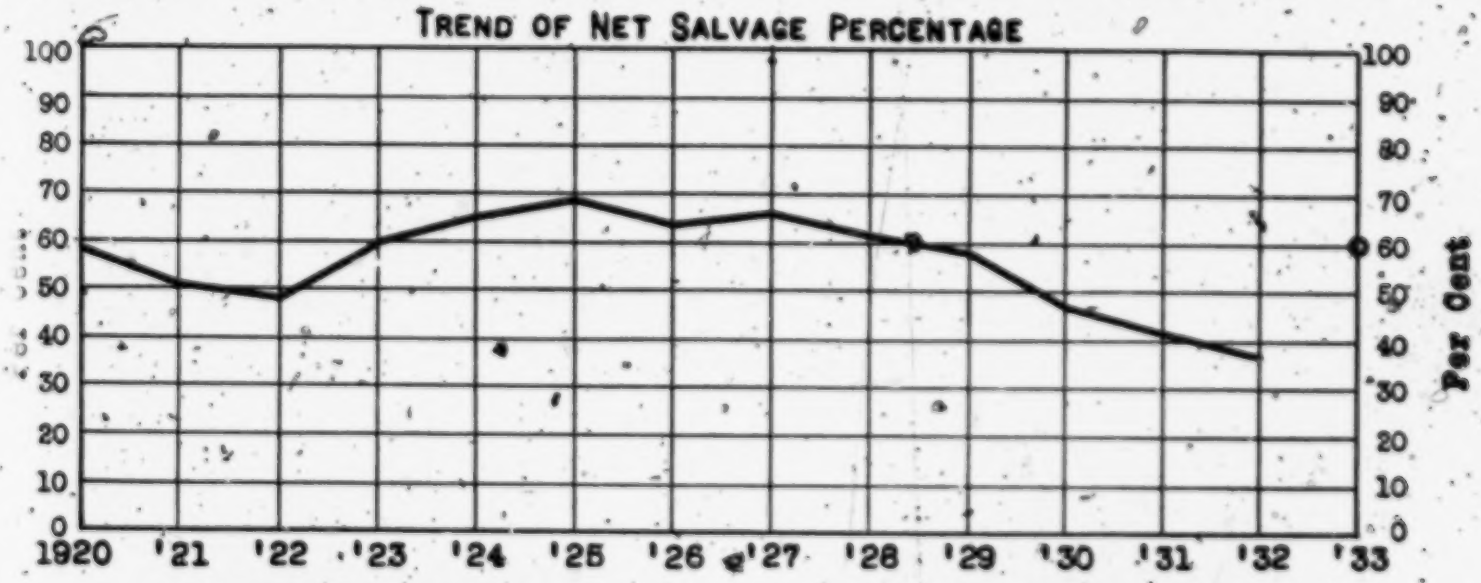
PERIOD	NET SALVAGE-%
1928	39
1929	46
1930	42
1931	35
1932	41

THE CHESAPEAKE AND POTOMAC TELEPHONE COMPANY
OF BALTIMORE CITY.

ANALYSIS OF SERVICE LIFE AND NET SALVAGE EXPERIENCE

BOOTHS AND SPECIAL FITTINGS





AVERAGE SERVICE LIFE

PERIOD *	AVG. LIFE-YRS.
1920	6.5
1921	7.2
1922	8.0
1923	8.3
1924	9.4
1925	10.3
1926	10.7
1927	9.7
1928	8.6
1929	7.8
1930	7.2
1931	7.1
1932	7.0

NET SALVAGE PERCENTAGE

PERIOD	NET SALVAGE-%
1918-1920	58
1919-1921	51
1920-1922	48
1921-1923	60
1922-1924	65
1923-1925	68
1924-1926	64
1925-1927	66
1926-1928	62
1927-1929	58
1928-1930	47
1929-1931	42
1930-1932	37

*End of turnover period.

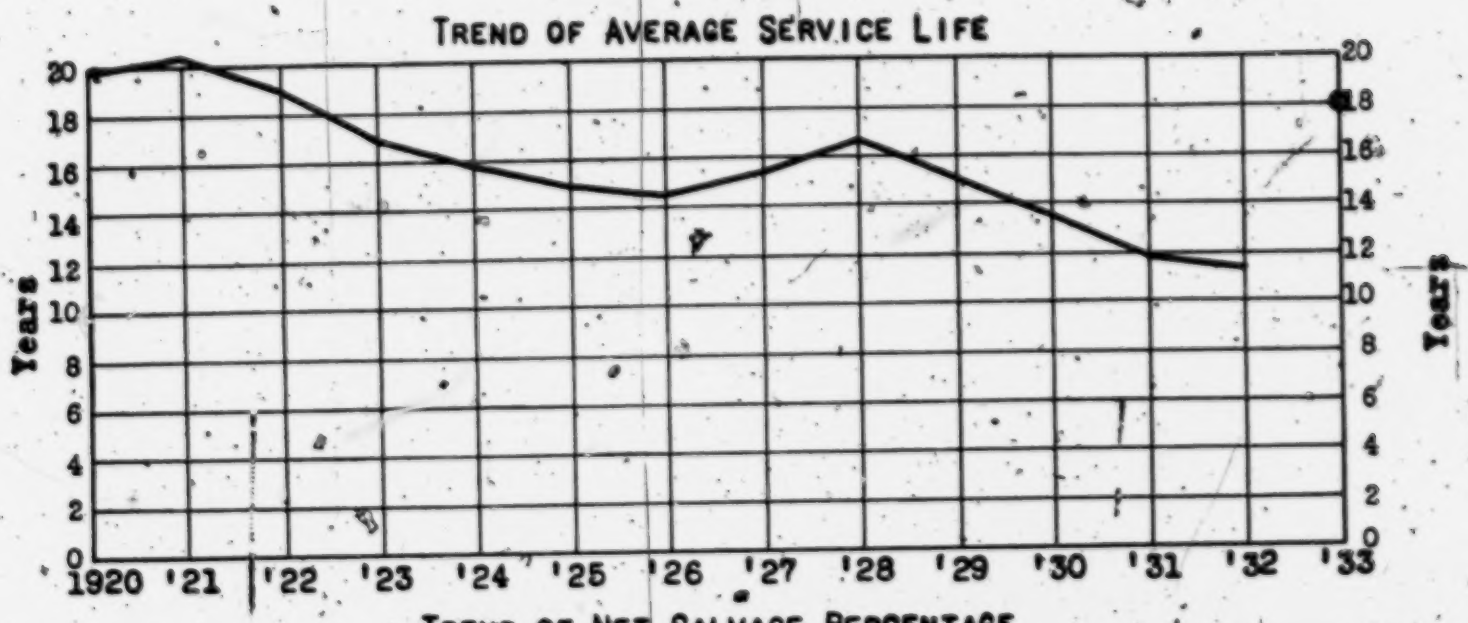
1395

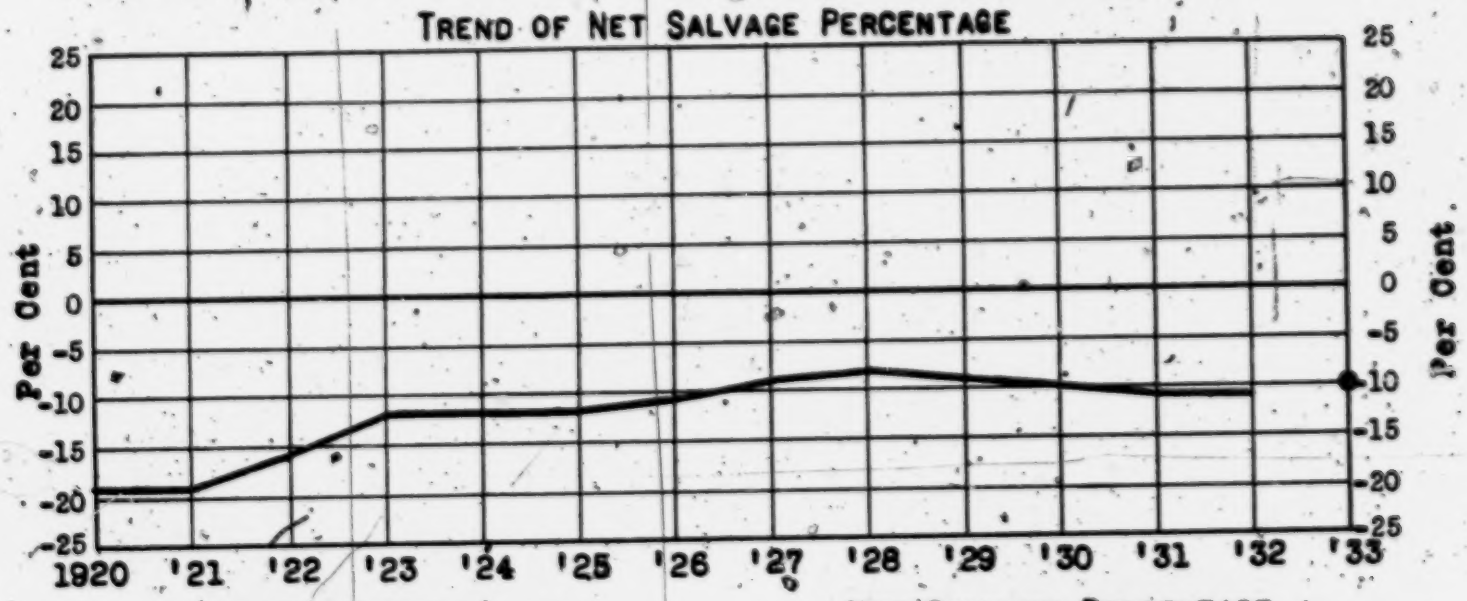
280

THE CHESAPEAKE AND POTOMAC TELEPHONE COMPANY
OF BALTIMORE CITY

ANALYSIS OF SERVICE LIFE AND NET SALVAGE EXPERIENCE

EXCHANGE POLE LINES





AVERAGE SERVICE LIFE

FERIOD	AVG. LIFE-YRS.
1918-1920	19.8
1919-1921	20.4
1920-1922	18.9
1921-1923	16.9
1922-1924	15.8
1923-1925	14.9
1924-1926	14.6
1925-1927	15.4
1926-1928	16.7
1927-1929	15.0
1928-1930	13.5
1929-1931	11.9
1930-1932	11.4

NET SALVAGE PERCENTAGE

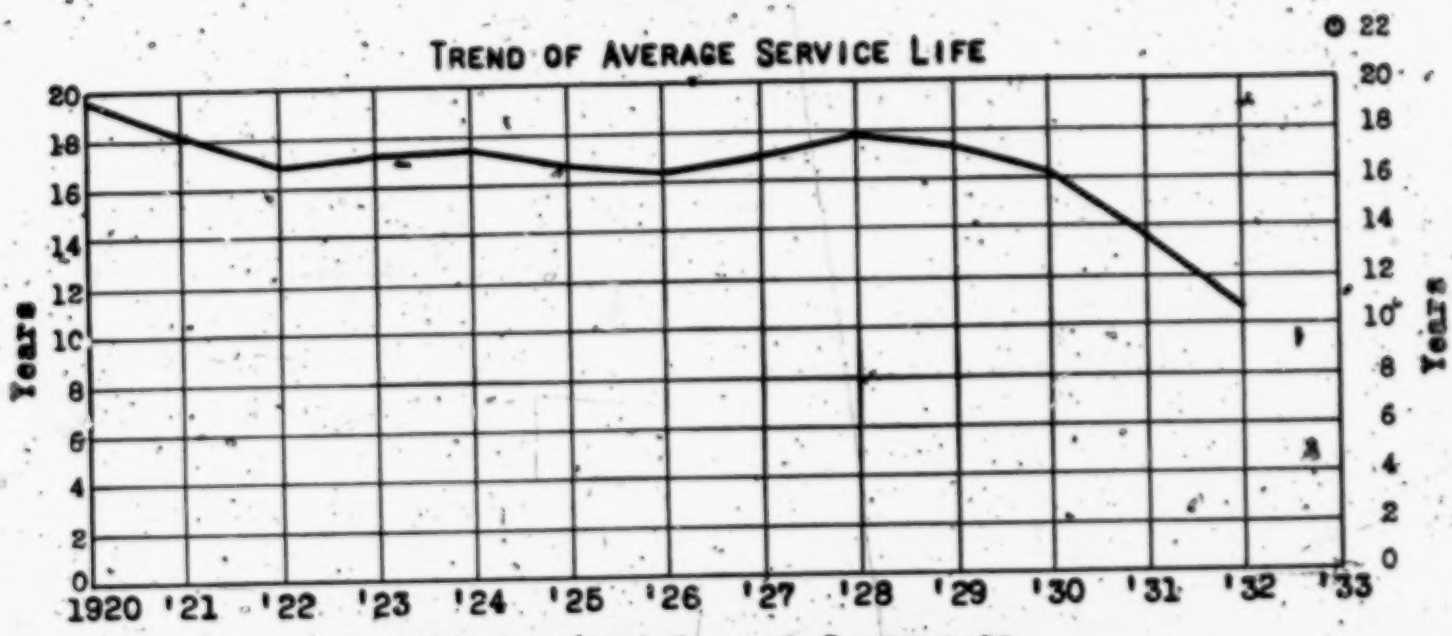
PERIOD	NET SALVAGE-%
1918-1920	-19
1919-1921	-19
1920-1922	-16
1921-1923	-12
1922-1924	-12
1923-1925	-12
1924-1926	-11
1925-1927	-9
1926-1928	-8
1927-1929	-9
1928-1930	-10
1929-1931	-11
1930-1932	-11

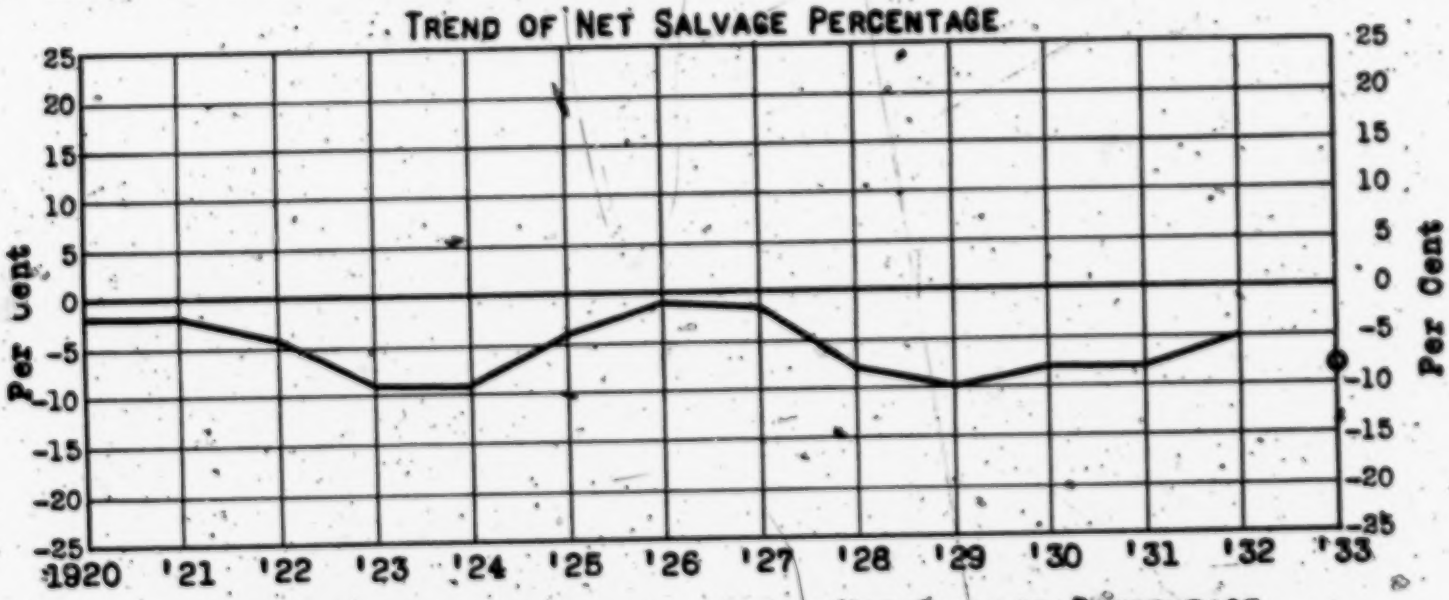
1396

THE CHESAPEAKE AND POTOMAC TELEPHONE COMPANY
OF BALTIMORE CITY

ANALYSIS OF SERVICE LIFE AND NET SALVAGE EXPERIENCE

TOLL POLE LINES





AVERAGE SERVICE LIFE

PERIOD	AVG. LIFE-YRS.
1918-1920	19.6
1919-1921	18.2
1920-1922	16.9
1921-1923	17.3
1922-1924	17.5
1923-1925	16.8
1924-1926	16.5
1925-1927	17.1
1926-1928	17.9
1927-1929	17.4
1928-1930	16.3
1929-1931	13.6
1930-1932	10.7

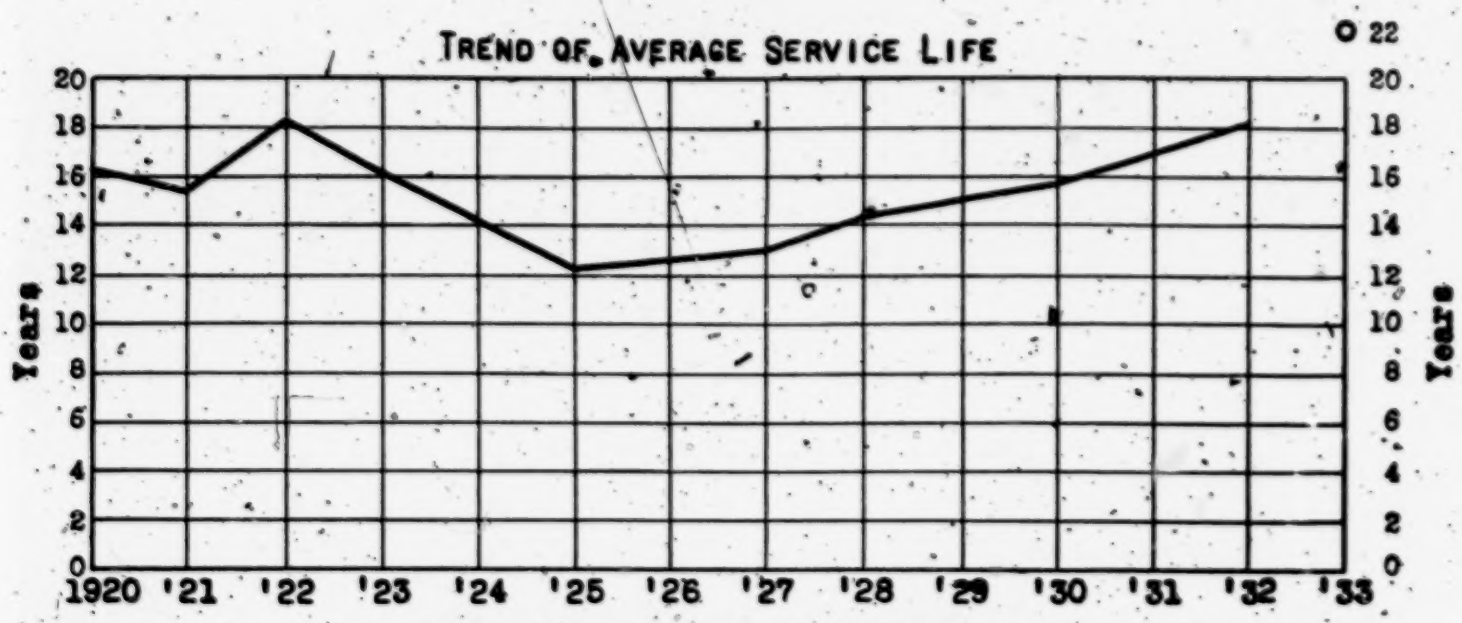
NET SALVAGE PERCENTAGE

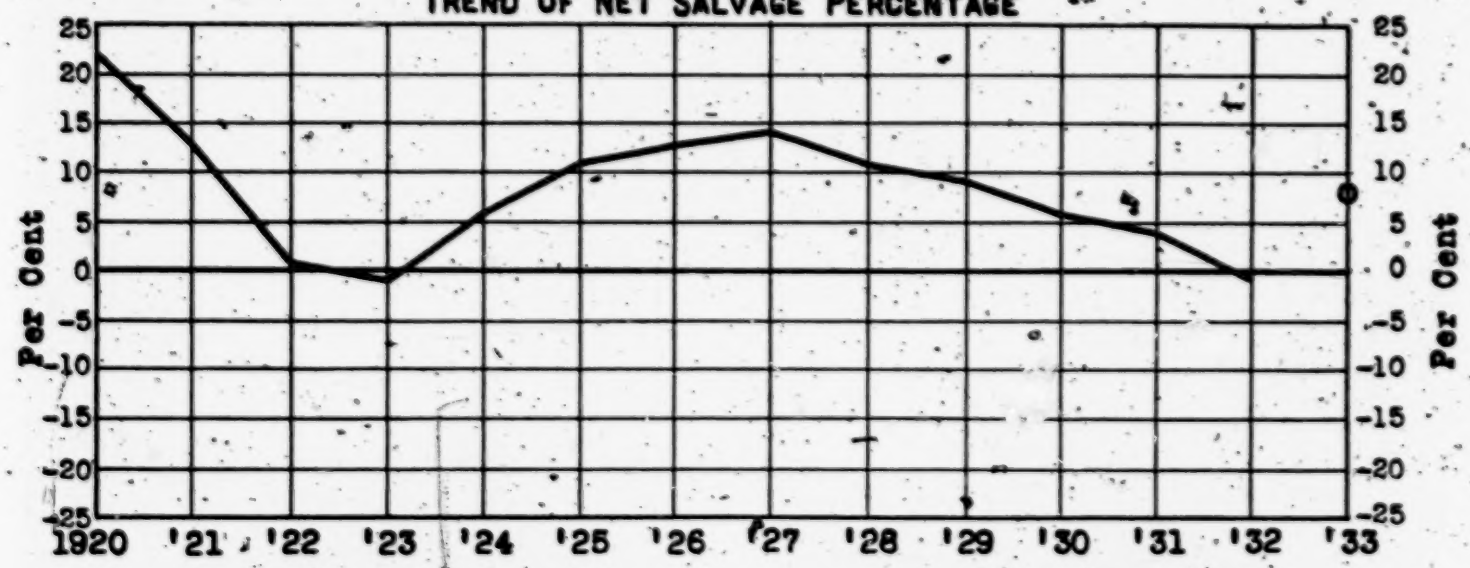
PERIOD	NET SALVAGE-%
1918-1920	-2
1919-1921	-2
1920-1922	-4
1921-1923	-9
1922-1924	-9
1923-1925	-4
1924-1926	-1
1925-1927	-2
1926-1928	-8
1927-1929	-10
1928-1930	-8
1929-1931	-8
1930-1932	-5

THE CHESAPEAKE AND POTOMAC TELEPHONE COMPANY
OF BALTIMORE CITY

ANALYSIS OF SERVICE LIFE AND NET SALVAGE EXPERIENCE

EXCHANGE AERIAL CABLE





AVERAGE SERVICE LIFE

PERIOD	AVG. LIFE-YRS.
1918-1920	16.2
1919-1921	15.4
1920-1922	18.3
1921-1923	16.1
1922-1924	14.2
1923-1925	12.3
1924-1926	12.6
1925-1927	13.1
1926-1928	14.3
1927-1929	15.2
1928-1930	15.7
1929-1931	17.0
1930-1932	18.2

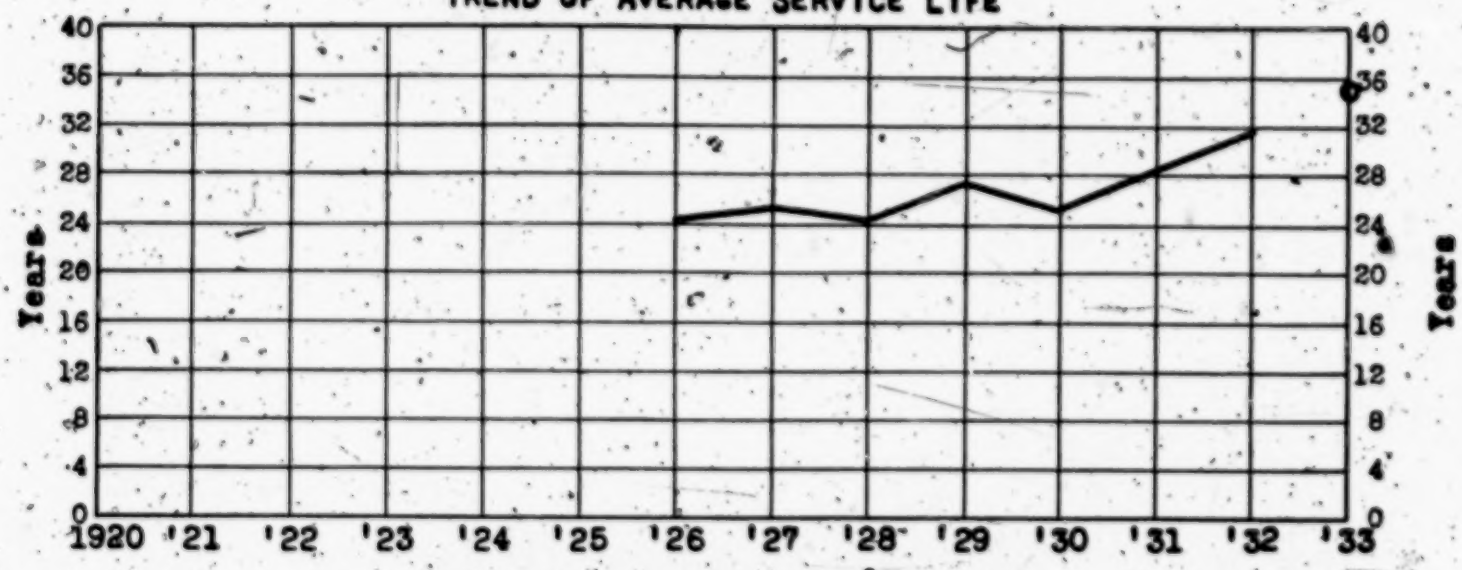
NET SALVAGE PERCENTAGE

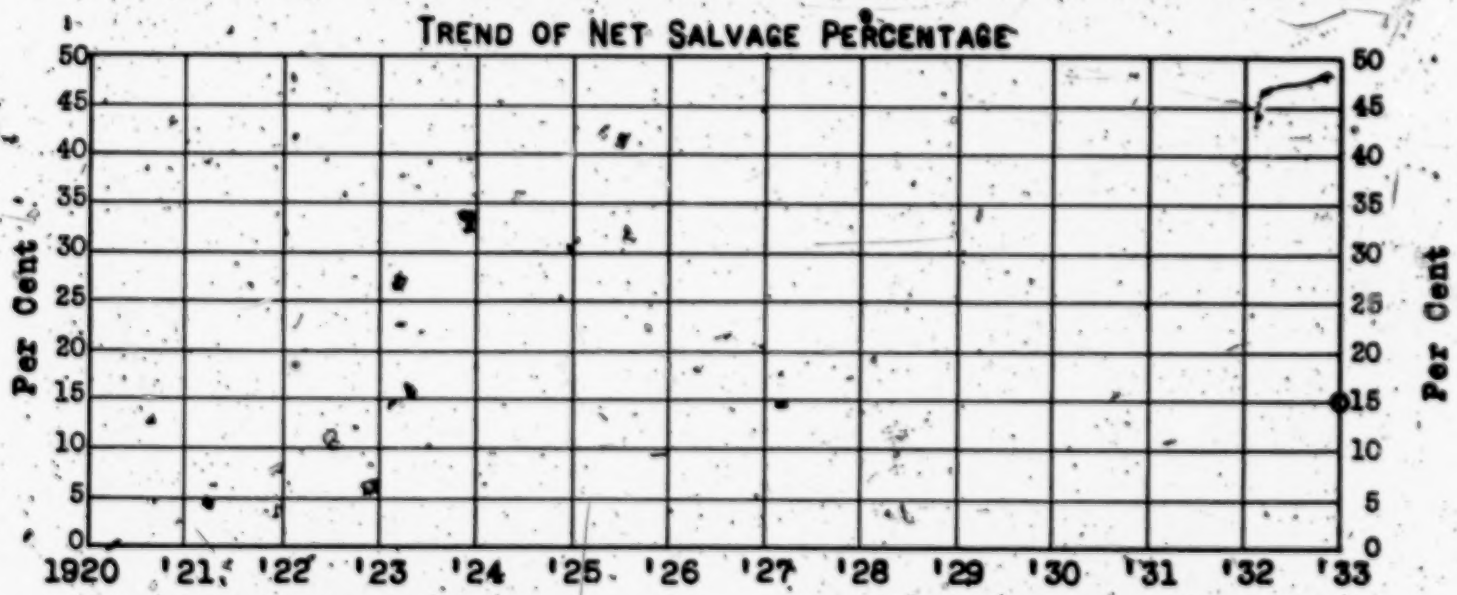
PERIOD	NET SALVAGE-%
1918-1920	22
1919-1921	13
1920-1922	1
1921-1923	-1
1922-1924	6
1923-1925	11
1924-1926	13
1925-1927	14
1926-1928	11
1927-1929	9
1928-1930	6
1929-1931	4
1930-1932	-1

THE CHESAPEAKE AND POTOMAC TELEPHONE COMPANY
OF BALTIMORE CITY

ANALYSIS OF SERVICE LIFE AND NET SALVAGE EXPERIENCE

EXCHANGE UNDERGROUND CABLE - MAIN





AVERAGE SERVICE LIFE

PERIOD	AVG. LIFE-YRS.
1924-1926	24.3
1925-1927	25.2
1926-1928	24.5
1925-1929	27.2
1926-1930	25.4
1927-1931	-
1928-1932	31.7

NET SALVAGE PERCENTAGE

PERIOD	NET SALVAGE-%

1399

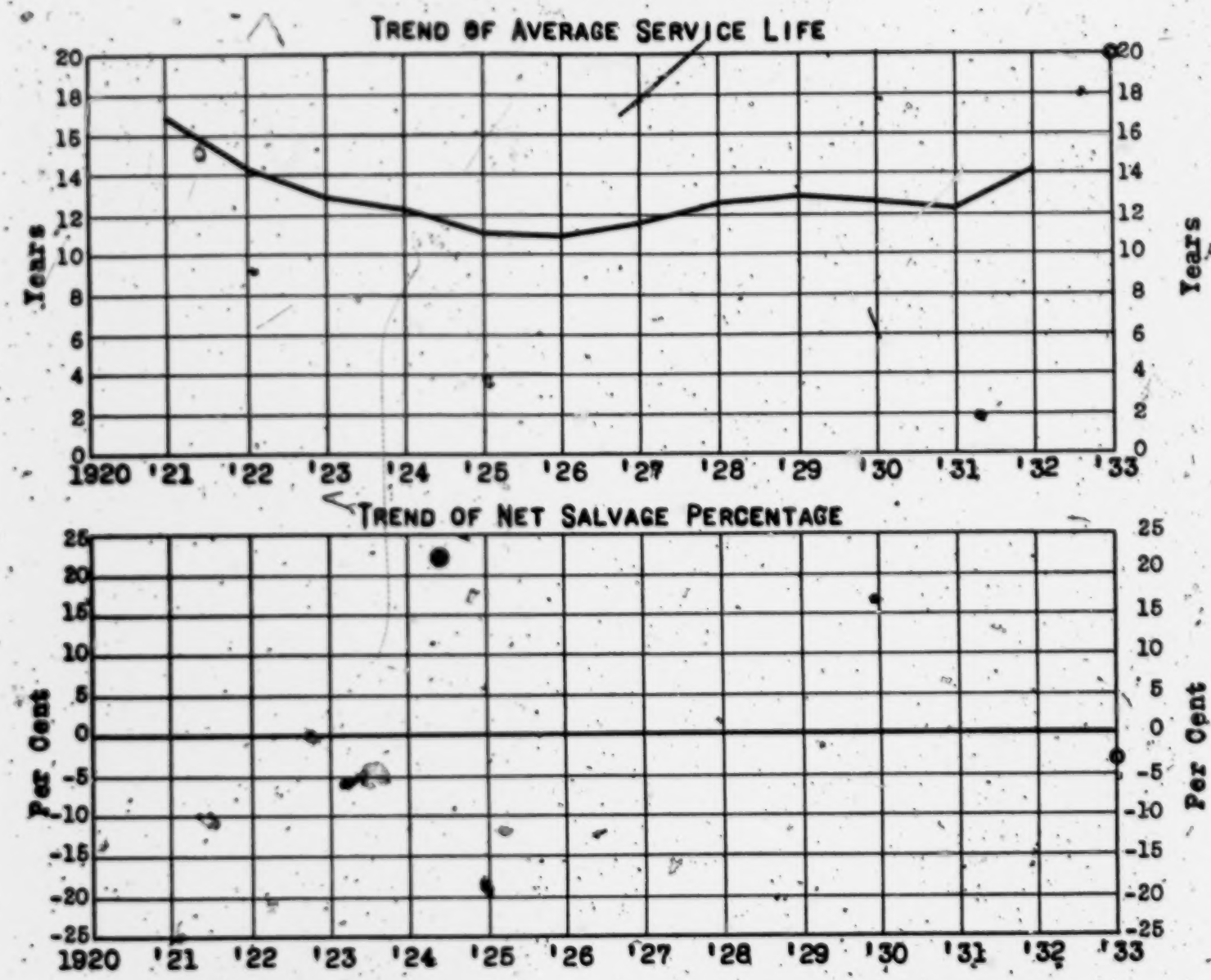
PLAINTIFF'S EXHIBIT No. A-39—Continued

12

THE CHESAPEAKE AND POTOMAC TELEPHONE COMPANY
OF BALTIMORE CITY

ANALYSIS OF SERVICE LIFE AND NET SALVAGE EXPERIENCE

EXCHANGE UNDERGROUND CABLE - SUBSIDIARY



AVERAGE SERVICE LIFE

PERIOD	AVG. LIFE-YRS.
1919-1921	16.9
1920-1922	14.3
1921-1923	12.9
1922-1924	12.3
1923-1925	11.1
1924-1926	10.9
1925-1927	11.6
1926-1928	12.6
1927-1929	13.0
1928-1930	12.7
1929-1931	12.4
1930-1932	14.2

NET SALVAGE PERCENTAGE

PERIOD	NET SALVAGE-%

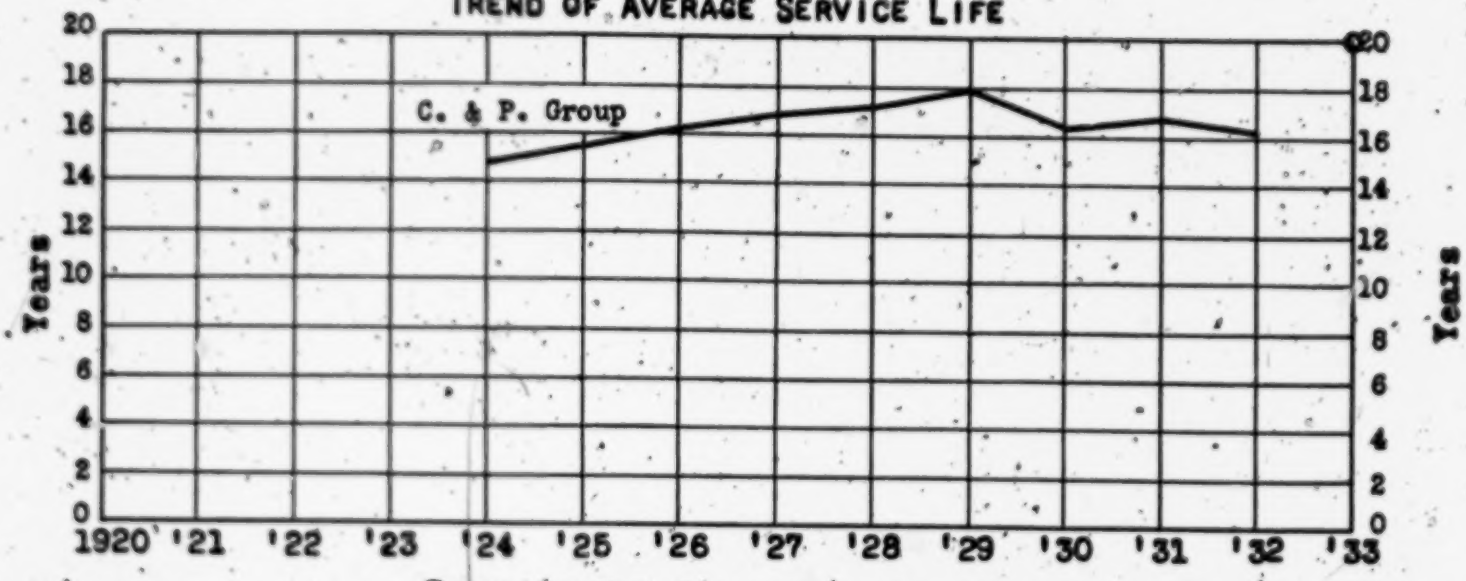
1400

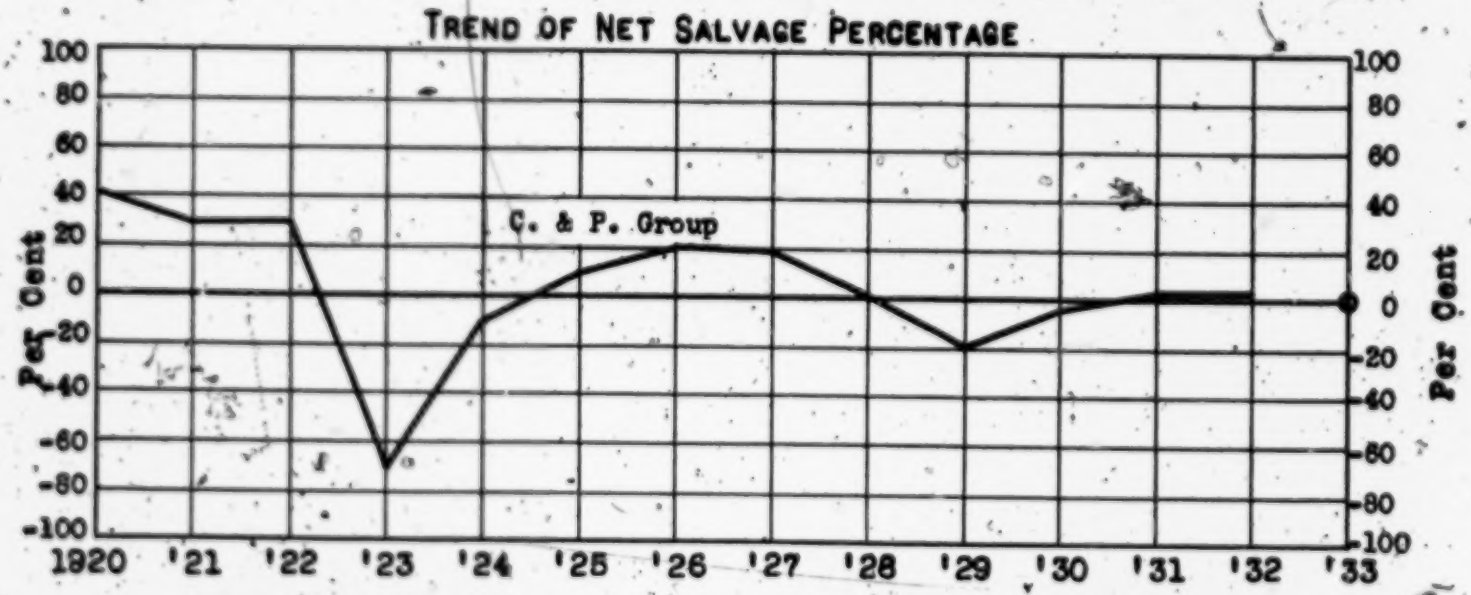
785

THE CHESAPEAKE AND POTOMAC TELEPHONE COMPANY
OF BALTIMORE CITY

ANALYSIS OF SERVICE LIFE AND NET SALVAGE EXPERIENCE

SUBMARINE CABLE





AVERAGE SERVICE LIFE

PERIOD *	AVG. LIFE-YRS.
1924	14.8
1925	15.5
1926	16.2
1927	16.8
1928	17.2
1929	17.9
1930	16.4
1931	16.8
1932	16.2

NET SALVAGE PERCENTAGE

PERIOD	NET SALVAGE-%
1918-1920	41
1919-1921	28
1920-1922	29
1921-1923	-70
1922-1924	-10
1923-1925	10
1924-1926	20
1925-1927	19
1926-1928	1
1927-1929	-19
1928-1930	-4
1929-1931	3
1930-1932	3

* End of turnover period.

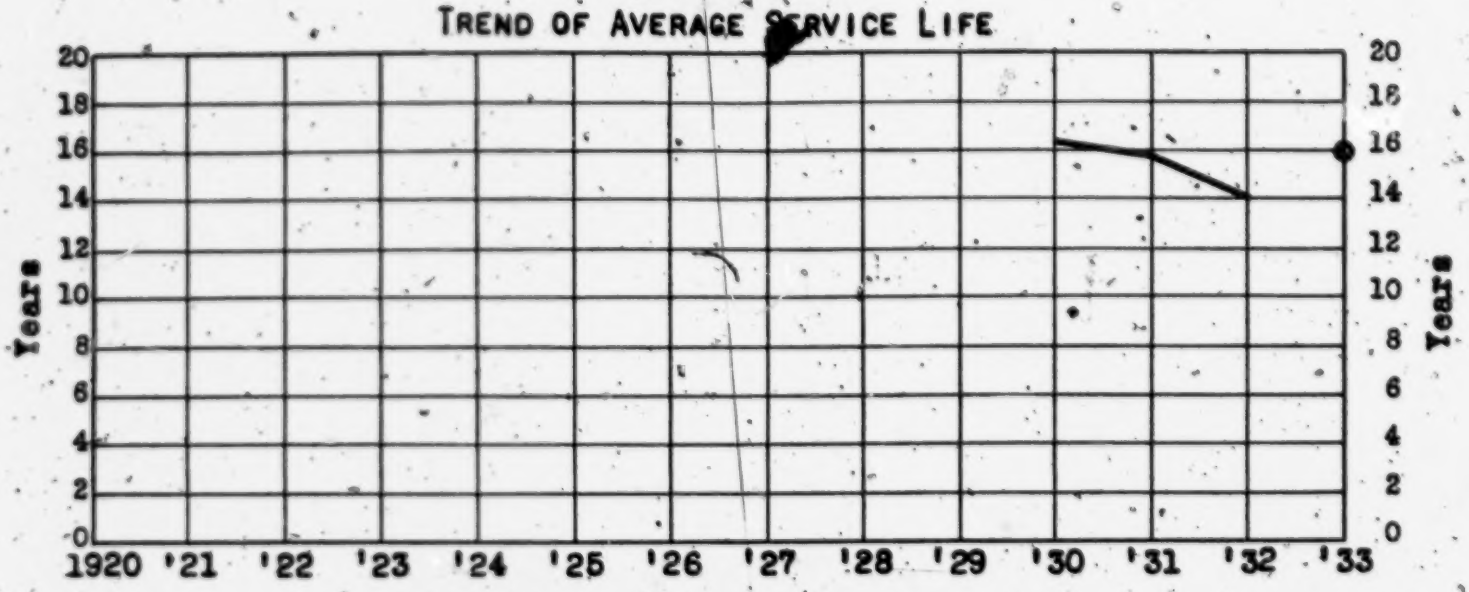
1401

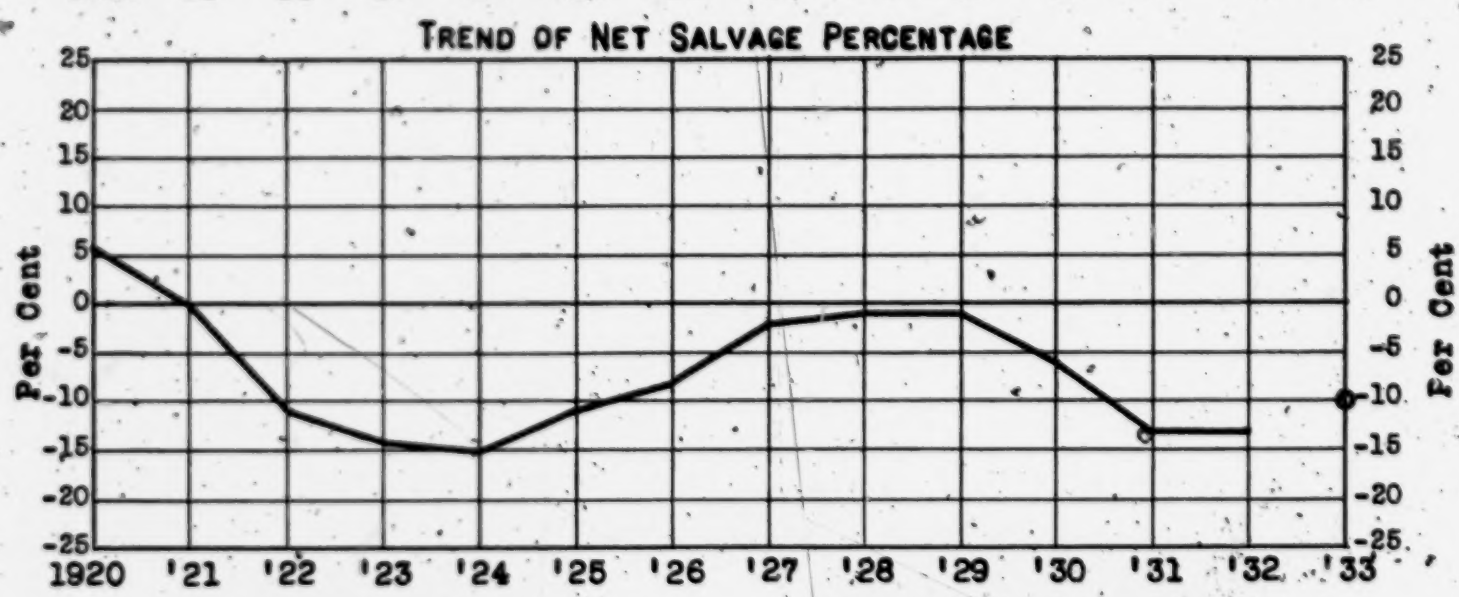
98

THE CHESAPEAKE AND POTOMAC TELEPHONE COMPANY
OF BALTIMORE CITY

ANALYSIS OF SERVICE LIFE AND NET SALVAGE EXPERIENCE

EXCHANGE AERIAL WIRE
(Line Wire Only)





AVERAGE SERVICE LIFE

PERIOD *	AVG. LIFE-YRS.
1930	16.4
1931	15.8
1932	14.1

* End of turnover period.

NET SALVAGE PERCENTAGE

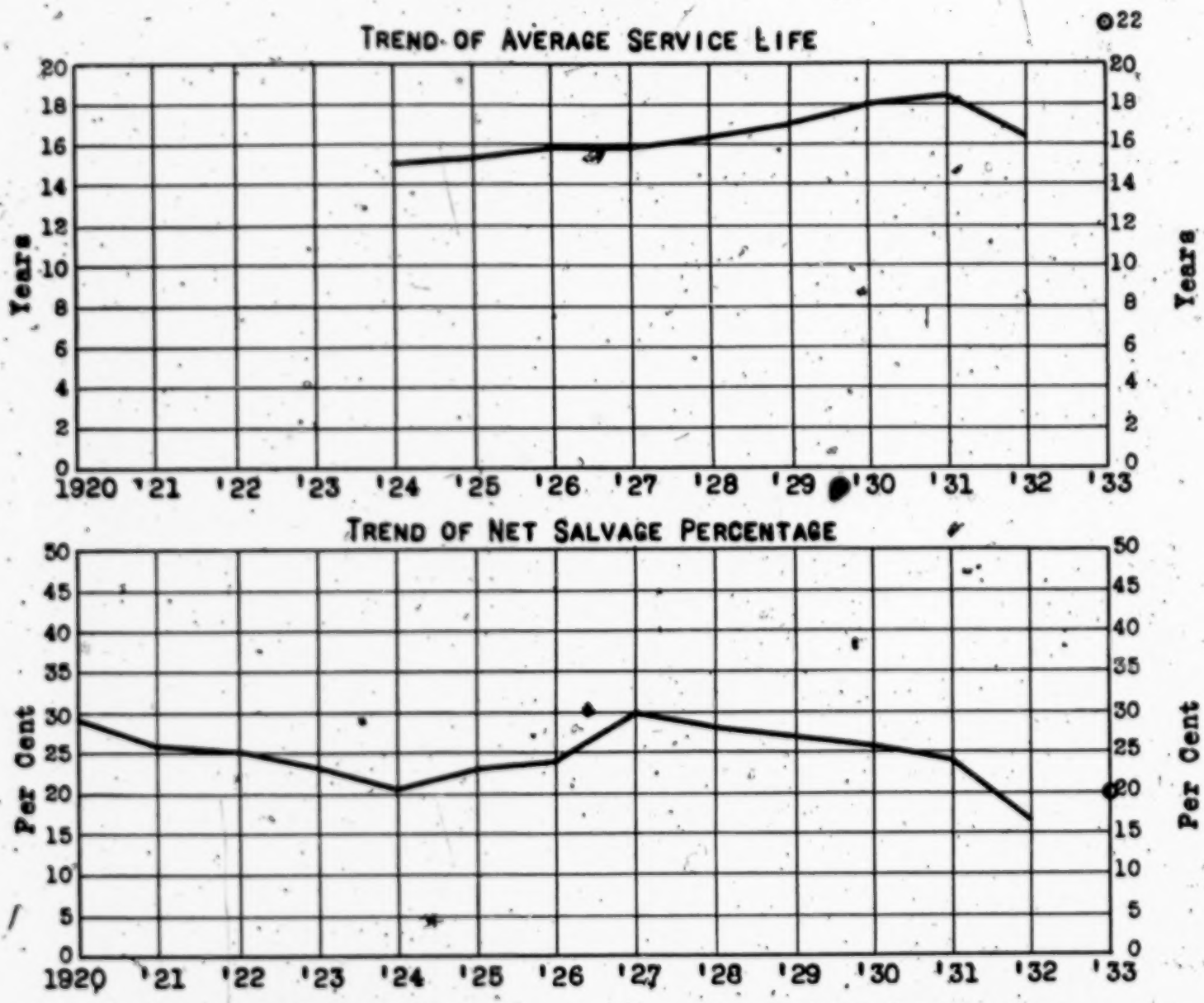
PERIOD	NET SALVAGE-%
1918-1920	6
1919-1921	0
1920-1922	-11
1921-1923	-14
1922-1924	-15
1923-1925	-11
1924-1926	-8
1925-1927	-2
1926-1928	-1
1927-1929	-1
1928-1930	-6
1929-1931	-13
1930-1932	-13

1402

THE CHESAPEAKE AND POTOMAC TELEPHONE COMPANY
OF BALTIMORE CITY

ANALYSIS OF SERVICE LIFE AND NET SALVAGE EXPERIENCE

TOLL AERIAL WIRE



AVERAGE SERVICE LIFE

PERIOD *	AVG. LIFE-YRS.
1924	15.1
1925	15.3
1926	15.8
1927	15.8
1928	16.3
1929	17.1
1930	18.0
1931	18.4
1932	16.4

NET SALVAGE PERCENTAGE

PERIOD	NET SALVAGE-%
1918-1920	29
1919-1921	26
1920-1922	25
1921-1923	23
1922-1924	21
1923-1925	23
1924-1926	24
1925-1927	30
1926-1928	28
1927-1929	27
1928-1930	26
1929-1931	24
1930-1932	17

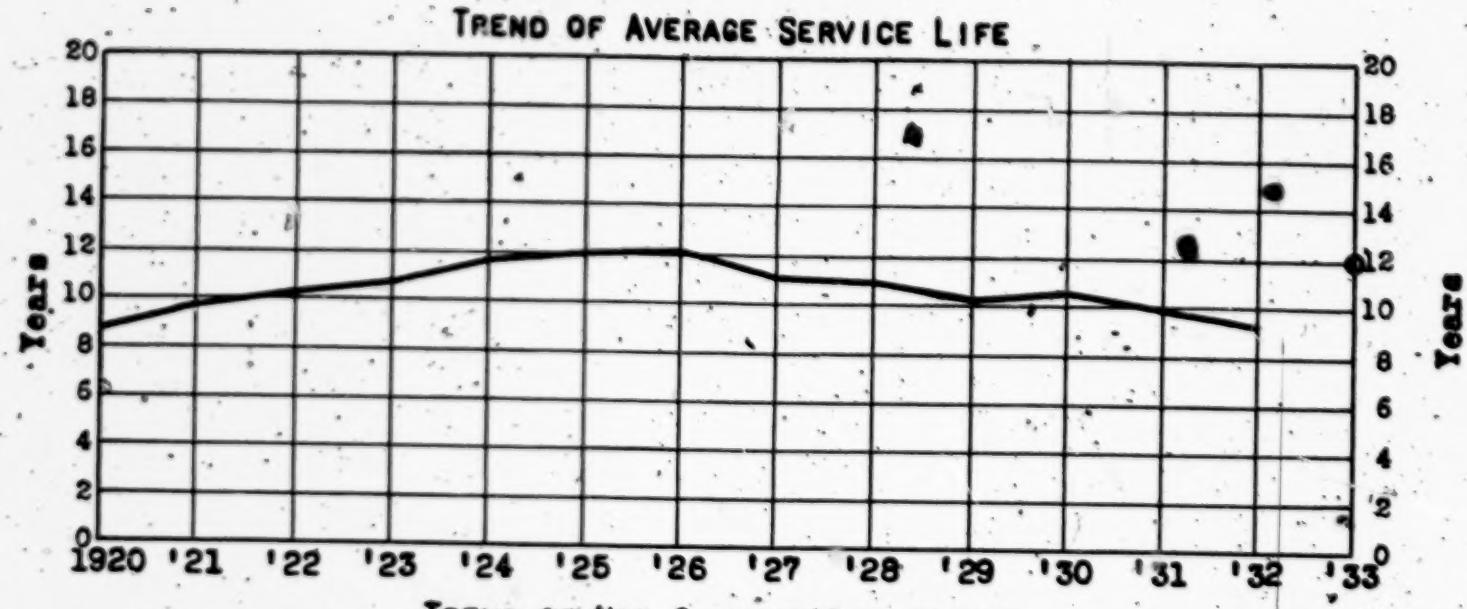
* End of turnover period.

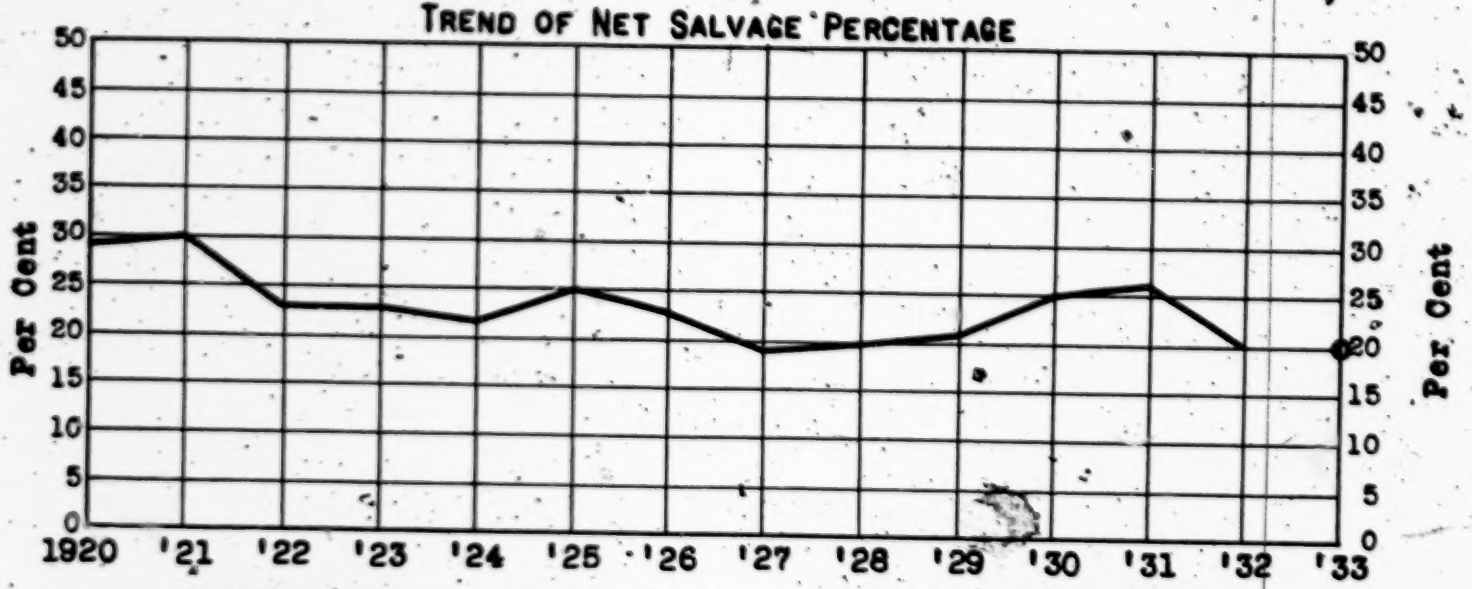
1403

THE CHESAPEAKE AND POTOMAC TELEPHONE COMPANY
OF BALTIMORE CITY

ANALYSIS OF SERVICE LIFE AND NET SALVAGE EXPERIENCE

OFFICE FURNITURE AND FIXTURES





AVERAGE SERVICE LIFE

PERIOD*	AVG. LIFE-YRS.
1920	8.7
1921	9.7
1922	10.2
1923	10.8
1924	11.7
1925	12.0
1926	12.1
1927	11.1
1928	11.0
1929	10.3
1930	10.5
1931	9.9
1932	9.3

* End of turnover period.

NET SALVAGE PERCENTAGE

PERIOD	NET SALVAGE-%
1918-1920	29
1919-1921	30
1920-1922	23
1921-1923	23
1922-1924	22
1923-1925	25
1924-1926	23
1925-1927	19
1926-1928	20
1927-1929	21
1928-1930	25
1929-1931	26
1930-1932	20

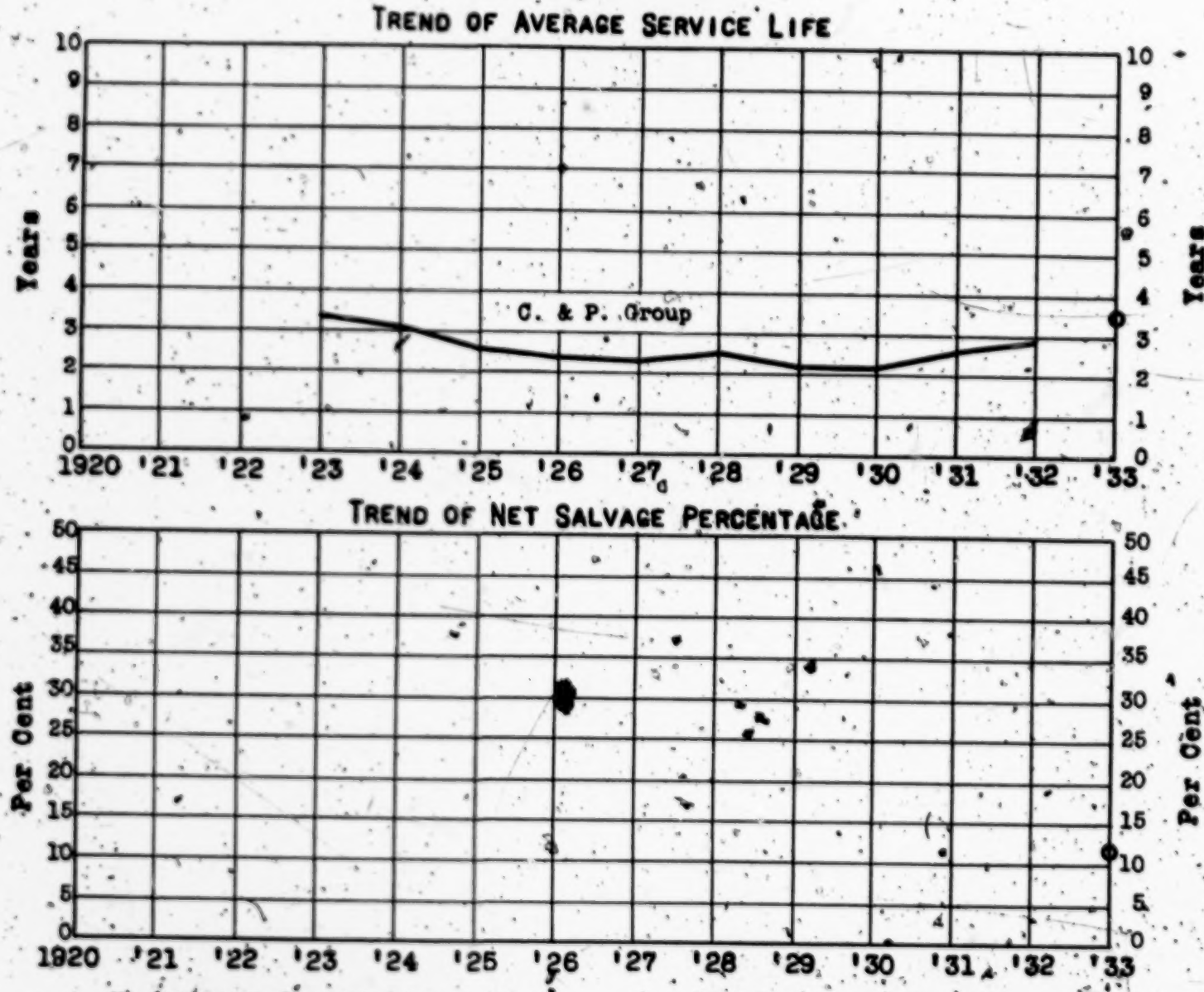
1404

682

THE CHESAPEAKE AND POTOMAC TELEPHONE COMPANY
OF BALTIMORE CITY

ANALYSIS OF SERVICE LIFE AND NET SALVAGE EXPERIENCE

MOTOR VEHICLES - FORDS



AVERAGE SERVICE LIFE

PERIOD	AVG. LIFE-YRS.
1921-1923	3.4
1922-1924	3.1
1923-1925	2.6
1924-1926	2.4
1925-1927	2.3
1926-1928	2.5
1927-1929	2.2
1928-1930	2.2
1929-1931	2.6
1930-1932	2.9

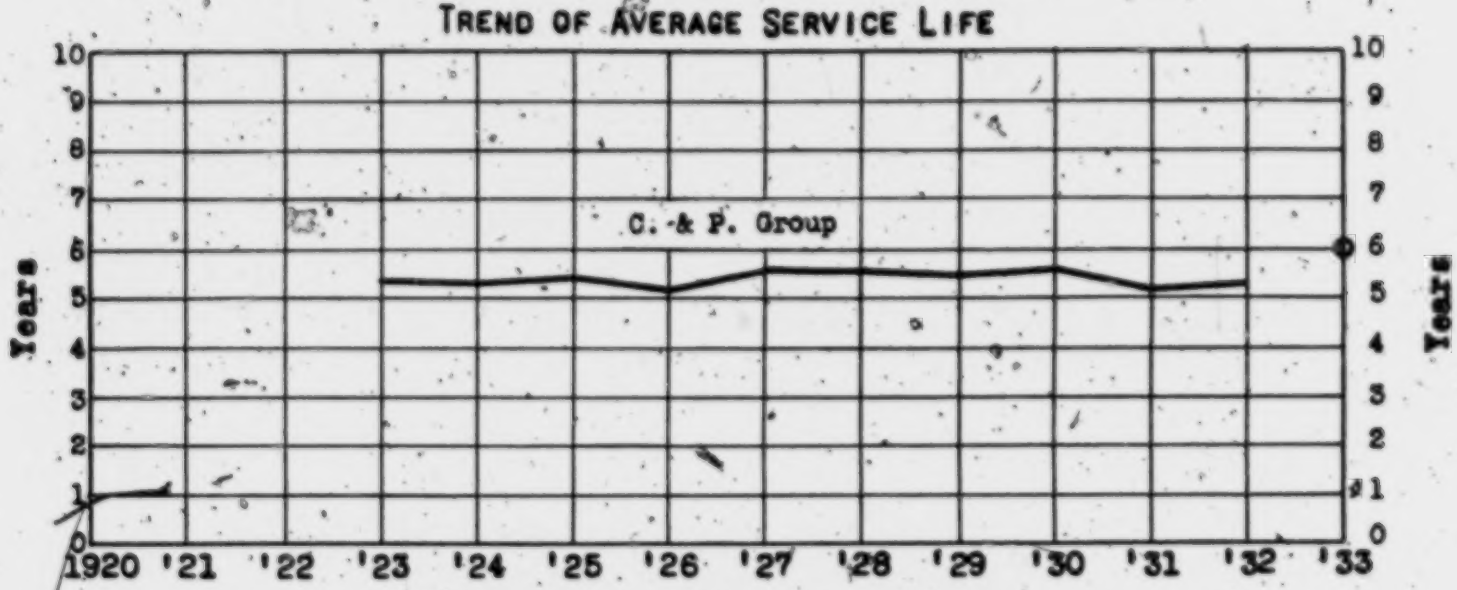
NET SALVAGE PERCENTAGE

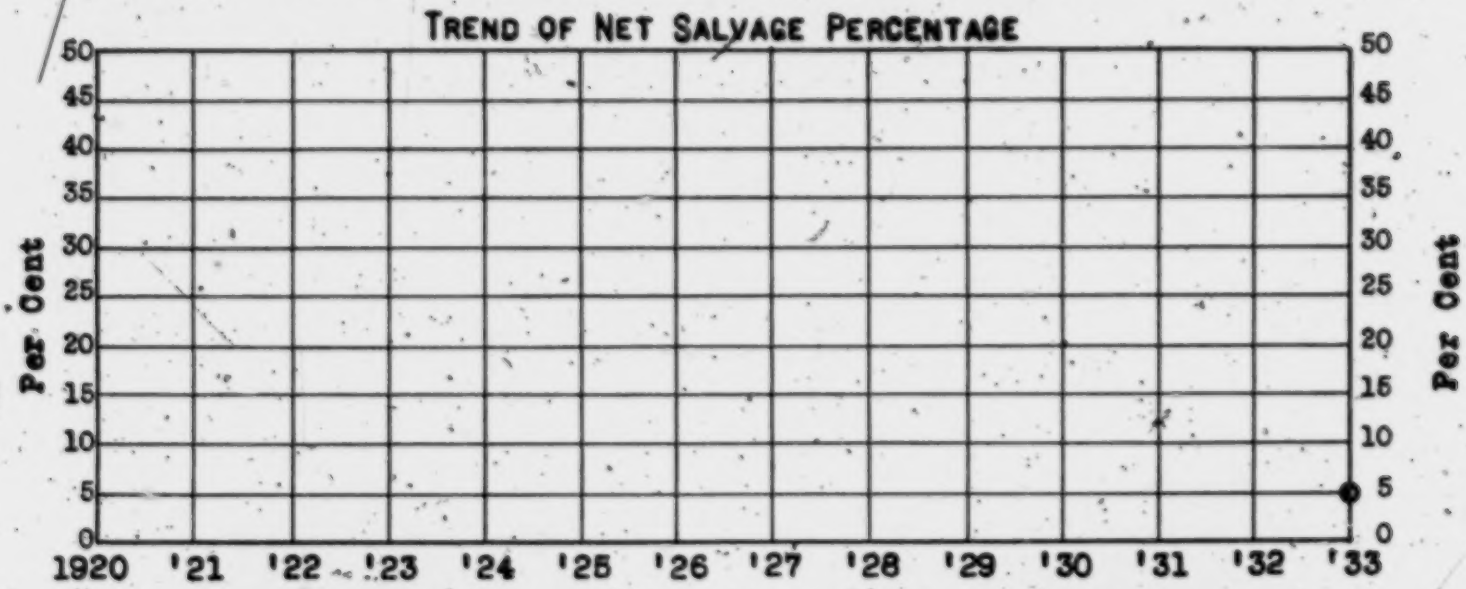
PERIOD	NET SALVAGE-%

THE CHESAPEAKE AND POTOMAC TELEPHONE COMPANY
OF BALTIMORE CITY

ANALYSIS OF SERVICE LIFE AND NET SALVAGE EXPERIENCE

MOTOR VEHICLES - OTHER THAN FORD VEHICLES





AVERAGE SERVICE LIFE

PERIOD	AVG. LIFE-YRS.
1921-1923	5.4
1922-1924	5.3
1923-1925	5.4
1924-1926	5.2
1925-1927	5.6
1926-1928	5.6
1927-1929	5.5
1928-1930	5.6
1929-1931	5.2
1930-1932	5.3

NET SALVAGE PERCENTAGE

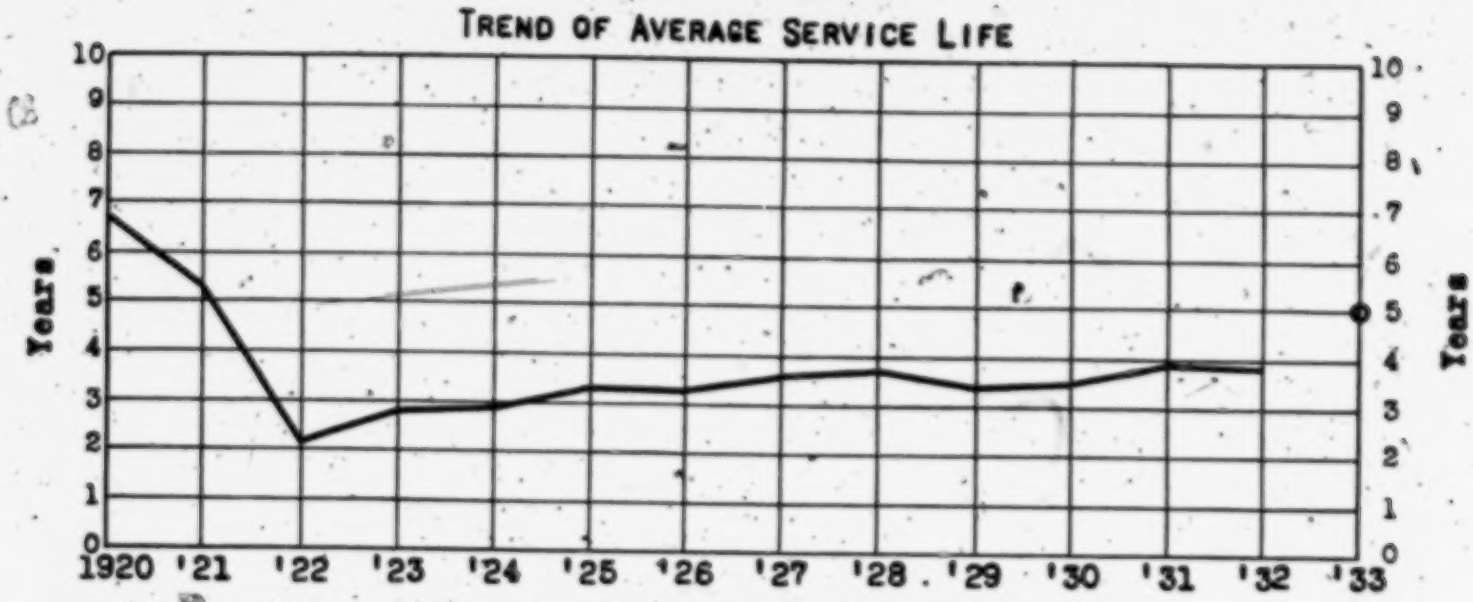
PERIOD	NET SALVAGE-%

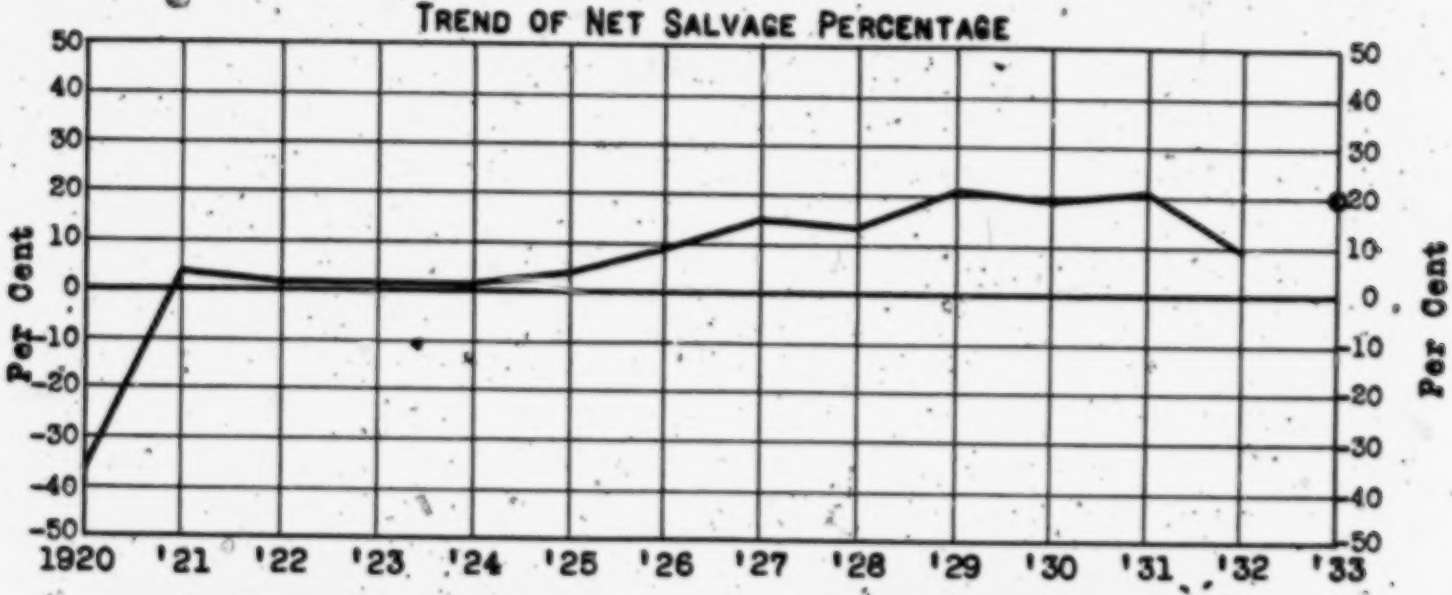
1406

THE CHESAPEAKE AND POTOMAC TELEPHONE COMPANY
OF BALTIMORE CITY

ANALYSIS OF SERVICE LIFE AND NET SALVAGE EXPERIENCE

GENERAL TOOLS AND IMPLEMENTS
(Other Work Equipment)





AVERAGE SERVICE LIFE

PERIOD *	AVG. LIFE-YRS.
1920	6.7
1921	5.3
1922	2.1
1923	2.8
1924	2.9
1925	3.3
1926	3.3
1927	3.6
1928	3.7
1929	3.4
1930	3.5
1931	3.9
1932	3.8

* End of turnover period.

NET SALVAGE PERCENTAGE

PERIOD	NET SALVAGE-%
1918-1920	-36
1919-1921	4
1920-1922	2
1921-1923	2
1922-1924	2
1923-1925	4
1924-1926	9
1925-1927	15
1926-1928	14
1927-1929	21
1928-1930	19
1929-1931	21
1930-1932	9

1407

792

[fol. 1408] PLAINTIFF'S EXHIBIT A-40

C. & P. TEL. CO. OF B. C.

v.

WEST et al.

U. S. Dist. Ct. Eq. No. 2240

Witness: Woodford

Date 3-24-34. Rec. p. 1599

Associated Operating Companies of Bell System

Comparison of Actual 1933 Charges to Account 608 "Depreciation" with Amounts Based on Current Depreciation Rates of Chesapeake and Potomac Telephone Company of Baltimore City

[fol. 1409] Associated Operating Companies

Comparison of Actual 1933 Charges to Account 608, "Depreciation," with Amounts Based on Current Depreciation Rates of Chesapeake and Potomac Telephone Company of Baltimore City.

Company	Actual charges to account 608 (A)	Depreciation expense at rates of C. & P. Tel. Co. of Baltimore City (B)	Ratio (A) to (B)
New England Tel. & Tel. Co	$11,640,064	$12,251,741	.95
Southern New England Tel. Co	2,907,432	3,031,757	.96
New York Tel. Co.—City	24,092,048	20,294,538	1.19
New York Tel. Co.—Elsewhere	10,197,311	9,486,180	1.07
New Jersey Bell Tel. Co	7,382,396	7,510,673	.98
Bell Tel. Co. of Pennsylvania	11,931,155	12,090,692	.99
Diamond State Tel. Co	345,647	342,494	1.01
Southern Bell Tel. & Tel. Co	9,502,739	10,023,238	.95
Ohio Bell Tel. Co	6,582,118	6,791,320	.97
Cincinnati & Suburban Bell Tel. Co	1,542,605	1,528,339	1.01
Michigan Bell Tel. Co	6,715,548	7,031,583	.96
Indiana Bell Tel. Co	1,931,493	1,974,774	.98
Wisconsin Tel. Co	3,318,636	3,173,150	1.05
Illinois Bell Tel. Co.—Chicago	8,033,437	8,016,870	1.00
Illinois Bell Tel. Co.—State	3,759,027	3,935,229	.96
Northwestern Bell Tel Co	5,187,446	5,564,758	.93
Southwestern Bell Tel. Co	13,251,105	13,602,678	.97
Mountain States Tel. & Tel. Co	3,788,295	4,142,519	.91
Pacific Tel. & Tel. Co	9,914,668	10,256,706	.97
Southern California Tel. Co	6,475,123	6,505,870	1.00
Bell Tel. Co. of Nevada	202,974	290,794	.70
Home Tel. & Tel. of Spokane	242,837	255,231	.95
Total	$148,944,104	$148,101,134	1.01

(Here follows photo, side folio 1410. Folios 1411-1414 omitted)

COMPUTATION OF AMOUNTS OF DEPRECIATION EXPENSE BASED ON RATES OF CHESAPEAKE & POTOMAC TEL. CO. OF BALTIMORE CITY

Class of Plant	C. & P. Co. of B.C. Rate	New England T. & T. Co.		So. New England Tel. Co.		New York Tel. Co.				New Jersey Bell Tel. Co.	
						New York City		Elsewhere			
		Average Book Cost	Depreciation Expense At Rates Of B.C. Co.	Average Book Cost	Depreciation Expense At Rates Of B.C. Co.	Average Book Cost	Depreciation Expense At Rates Of B.C. Co.	Average Book Cost	Depreciation Expense At Rates Of B.C. Co.	Average Book Cost	Depreciation Expense At Rates Of B.C. Co.
Exchange Right-of-Way	2.5	$ 1,285,798	$ 32,145	$ 550,634	$ 13,766	$ 1,248,870	$ 31,222	$ 1,808,859	$ 45,221	$ 1,305,587	$ 32,640
Toll Right-of-Way	2.0	1,223,059	24,461	281,445	5,629	4,072	81	2,198,669	43,973	308,112	6,162
Buildings	2.8	25,732,349	720,506	8,591,776	240,570	87,444,887	2,448,457	22,733,987	636,552	23,802,174	666,461
Manual Central Office Tel. Eqpt.	5.6	36,474,299	2,041,441	4,788,518	268,157	54,944,748	3,076,906	26,977,127	1,510,719	23,482,274	1,315,007
Dial Central Office Tel. Eqpt.	4.5	37,892,080	1,705,144	10,806,186	486,278	132,899,993	5,980,500	18,380,892	827,140	21,162,735	952,323
Station Apparatus	7.0	20,010,503	1,400,735	4,810,560	336,739	26,513,877	1,855,971	14,340,474	1,003,833	10,627,765	743,944
Private Branch Exchanges	8.2	7,995,476	655,629	2,089,035	171,301	23,727,329	1,945,641	4,684,589	384,136	5,016,537	411,356
Booths & Special Fittings	5.0	2,915,575	145,779	485,224	24,261	7,631,833	381,592	2,249,906	112,495	1,993,217	99,661
Exchange Pole Lines	6.1	22,097,897	1,347,972	5,970,576	364,205	3,652,764	222,819	15,970,031	974,172	9,763,815	595,593
Exchange Aerial Cable	4.2	25,774,676	1,082,536	7,981,692	335,231	7,857,579	330,018	23,506,501	987,273	17,561,068	737,565
Exchange Aerial Wire	8.4	3,685,000	309,540	1,603,524	134,696	27,370	2,299	3,688,655	309,847	2,133,863	179,244
Exchange Underground Conduit	2.0	21,582,690	431,654	7,353,090	147,062	20,516,729	410,335	19,143,440	382,869	14,801,932	296,039
Exchange Underground Cable	3.2	33,877,245	1,084,072	7,636,861	244,380	89,508,511	2,864,272	23,773,723	760,759	23,015,817	736,506
Exchange Submarine Cable	5.0	249,903	12,495	109,447	5,472	227,391	11,370	93,060	4,653	173,842	8,692
Toll Pole Lines	4.9	7,515,969	368,282	1,114,383	54,605	24,272	1,189	9,019,307	441,946	1,998,271	97,915
Toll Aerial Cable	2.8	6,150,770	172,222	2,120,410	59,371	193,598	5,421	13,515,281	378,428	4,884,299	136,760
Toll Aerial Wire	5.1	5,349,016	272,800	456,314	23,272	544	28	4,372,292	222,987	633,140	32,290
Toll Underground Conduit	1.7	2,860,447	48,968	275,707	4,687	771,997	13,124	6,970,377	118,496	3,351,558	56,976
Toll Underground Cable	2.4	7,345,034	176,281	2,336,362	56,073	11,138,264	267,318	8,066,330	193,592	9,346,359	224,313
Toll Submarine Cable	5.0	417,125	20,856	52,486	2,624	329,077	16,454	178,014	8,901	693,595	34,680
Furniture & Office Equipment	6.7	2,958,557	198,22_	796,684	53,378	6,410,768	429,521	2,062,509	138,188	2,187,253	146,546
Total			12,251,741		3,031,757		20,294,538		9,486,180		7,510,673

[fol. 1415] PLAINTIFF'S EXHIBIT A-41

American Telephone and Telegraph Company—Year 1933

Average Cost of Funds Used in Business

	Average amount for year	Dividends, interest and amortization charges	Average rate paid per cent
Capital Stock	$1,866,227,500.00	$167,960,475.00	9.00
Capital Stock Premiums	268,749,077.67	0	0
Total	$2,134,976,577.67	$167,960,475.00	7.87
Surplus—Unappropriated and Appropriated	339,137,187.36	0	0
Total	$2,474,113,765.03	$167,960,475.00	6.79
Capital Stock Installments	13,363,516.34	617,094.48	4.62
Funded Debt	421,221,040.18	23,662,194.10	5.62
Loans from Associated Companies	11,301,073.98	664,503.15	5.88
Notes Payable to Pension Fund Trustees	13,823,754.75	552,950.19	4.00
Total	$2,933,823,150.28	$193,457,216.92	6.59

[fol. 1416]

PLAINTIFF'S EXHIBIT A-42

Principal Bond Issues of Associated Companies of the Bell Telephone System in U. S., During the 10-Year Period, January 1, 1922, to December 31, 1931

Company	Description of security	Par amount of issue	Yield to first purchaser	Cost to company
1922				
New England Tel. and Tel. Co.	First Mtge. Series "A" 5s of 1952	$35,000,000	5.15	5.37
The Pacific Tel. and Tel. Co.	Ref. Mtge. Series "A" 5s of 1952	25,000,000	5.40	5.62
The Ches. and Pot. Tel. Co. of Va.	First Mtge. 5s of 1943	1,500,000	5.57	5.70
1923				
Illinois Bell Tel. Co.	First & Ref. Mtge. Series "A" 5s of 1956	50,000,000	5.30	5.53
The Bell Tel Co. of Pa.	First & Ref. Mtge. Series "B" 5s of 1948	35,000,000	5.10	5.33
1924				
Southwestern Bell Tel. Co.	First & Ref. Mtge. Series "A" 5s of 1954	50,000,000	5.45	5.70
1925				
The Bell Tel. Co. of Pa.	First & Ref. Mtge. Series "C" 5s of 1960	50,000,000	5.00	5.19
1926				
New England Tel. and Tel. Co.	First Mtge. Series "B" 4½s of 1961	40,000,000	4.83	5.02
1929				
Southern Bell Tel. and Tel. Co.	First Mtge. 5s of 1941	32,000,000	5.00	5.32

[fol. 1417] PLAINTIFF'S EXHIBIT A-43

C. & P. TEL. Co. of B. C. v. WEST et al. U. S. Dist. Ct.. Eq. No. 2240

Witness: Gretz

Date: ——. Rec. p. —

The Chesapeake and Potomac Telephone Company of Baltimore City

Revenues, Expenses and Station Statistics—Years 1933 and 1934 (Estimated)
(Under the Accounting Classification in Effect Since December 31, 1932)

		Year 1933*	Year 1934* (Estimated)
	Revenues—		
1	Local Service Revenues (500 to 506)	$9,502,630	$9,625,000
2	Toll Service Revenues (510 to 516)	2,509,669	2,672,000
3	Miscellaneous Revenues (521 to 526)	413,200	403,000
4	Other Telephone Revenues (313 (Tel.), 315, 316)	1,119	250
5	Total Telephone Revenues	$12,426,618	$12,700,250
	Expenses—		
6	Current Maintenance (602 to 607, 610, 612)	$2,072,210	$2,208,000
7	Depreciation (608)	2,166,211	2,173,000
8	Traffic (621 to 635)	1,706,543	1,865,000
9	Commercial (640 to 650)	1,022,320	1,081,000
10	General Office Salaries and Expenses (661 to 665)	544,491	545,000
11	Operating Rents (671)	199,548	174,000
12	Relief and Pensions (672)	205,636	213,000
13	General Services and Licenses (674)	177,013	181,000
14	Misc. Operating Expenses (668, 669, 673, 675, 676)	56,654	69,000
15	Expenses Charged Construction—Cr. (677)	—34,871	—54,000
16	Uncollectible Operating Revenues—Dr. (530)	127,968	88,000
17	Operating Taxes (305)	1,624,934	1,558,245
18	Amortization of Rate Case Expense	30,000	30,000
19	Total Telephone Expenses	$9,898,657	$10,131,245
20	Net Telephone Revenues	$2,527,961	$2,569,005
21	Net Increase in Telephone Property	$33,332	$209,000
22	Average Net Increase in Telephone Property	—72,489	75,000
	Station Statistics		
23	Inward Station Movement	42,438	48,000
24	Outward Station Movement	51,470	43,000
25	Net Station Gain	—9,032	5,000
26	Average Company Stations	201,277	201,699
27	Total Stations End of Period	199,127	204,127

*Adjusted to place Rate Case expenses on an amortization basis and to place Depreciation expense for 1933 on the basis of the rates in effect after March 31, 1933.

PLAINTIFF'S EXHIBIT A-44

C. & P. TEL. Co. of B. C. v. WEST et al. U. S. Dist. Ct. Eq. No. 2240

Witness: Gretz

Date: ——. Rec. p. —.

The Chesapeake and Potomac Telephone Company of Baltimore City

Summary of Evidences of Value

		A Dec. 31 1932	B Dec. 31 1933	C Jan. 1 1934	D Average for year 1933*	E Average for year 1934*
	Cost—					
1	Investment Cost of Property	$49,991,947	$50,025,279	$50,025,279	$50,008,613	$50,100,279
2	Working Capital	1,615,000	1,615,000	1,615,000	1,615,000	1,615,000
3	Total Cost—Entire Property	$51,606,947	$51,640,279	$51,640,279	$51,623,613	$51,715,279
4	Intrastate Portion (85%)	43,865,905	43,894,237	43,894,237	43,880,071	43,957,987
	Reproduction Cost New—					
5	Reproduction Cost New of Physical Property	48,211,121	49,031,267	50,431,267	48,621,194	50,506,267
6	Working Capital	1,615,000	1,615,000	1,615,000	1,615,000	1,615,000
7	Going Value	4,500,000	4,500,000	4,500,000	4,500,000	4,500,000
8	Total Reproduction Cost New—Entire Property	$54,326,121	$55,146,267	$56,546,267	$54,736,194	$56,621,267
9	Intrastate Portion (85%)	46,177,203	46,874,327	48,064,327	46,525,765	48,128,077
	Reproduction Cost Less Depreciation—					
10	Reproduction Cost of Physical Property, less Depreciation	$41,851,119	$42,307,816	$43,532,816	$42,079,467	$43,607,816
11	Working Capital	1,615,000	1,615,000	1,615,000	1,615,000	1,615,000
12	Going Value	4,500,000	4,500,000	4,500,000	4,500,000	4,500,000
13	Total Reproduction Cost Less Depreciation—Entire Property	$47,966,119	$48,422,816	$49,647,816	$48,194,467	$49,722,816
14	Intrastate Portion (85%)	40,771,201	41,159,394	42,200,644	40,965,297	42,264,394

* Average for 1933 is the mean average of the December 31, 1932, and December 31, 1933, amounts.
* Average for 1934 is the January 1, 1934, amount plus estimated average net additions of $75,000.

Note—Depreciation Expense based on Value (undepreciated) in accordance with United Railways Case	$2,105,298	$2,186,921
Depreciation Expense based on Cost (as shown on Books)	2,166,211	2,173,000
Decrease	$60,913	$—13,921

C & P TEL. CO. OF B.C. v. WEST et al. U.S. DISTCT CO. NO 2240
Plaintiff's Exhibit A-45 REVISED
Witness GRETZ
ORIGINALLY FILED ON Date 3-24-34 Rec p 1727

THE CHESAPEAKE AND POTOMAC TELEPHONE COMPANY OF BALTIMORE CITY

RATE OF RETURN ON EVIDENCES OF VALUE UNDER EXISTENG RATES AND AFTER GIVING EFFECT TO REDUCTION IN NET REVENUES FROM INTRASTATE OPERATIONS UNDER ORDERS 24065 AND 24985

(Revised in accordance with stipulation dated March 31, 1934)

		A	B	C	D	E	F
		Year 1933			Year 1934 (Estimated)		
		Total Property and Business	Intrastate Portion Per Cent.	Intrastate Portion Amount	Total Property and Business	Intrastate Portion Per Cent.	Intrastate Portion Amount
	Evidences of Value (Averaged) (Exhibit A-44)						
1	Cost	$51,623,613	85%	$43,880,071	$51,715,279	85%	$43,957,987
2	Reproduction Cost New	54,736,194	85%	46,525,765	56,621,267	85%	48,128,077
3	Reproduction Cost Less Depreciation	48,194,467	85%	40,965,297	49,722,816	85%	42,264,394
	Per Cent. Return Under Existing Rates						
4	Net Telephone Revenues after deducting:						
	(a) Depreciation on Cost (Exhibit A-43)	2,527,961	85%	2,148,767	2,569,005	85%	2,183,654
	(b) Depreciation on Value (Adjustment as per Exhibit A-44)	2,588,874	85%	2,200,543	2,555,084	85%	2,171,821
5	Per Cent. Return						
	(a) On Cost (4a ÷ 1)	4.90%		4.90%	4.97%		4.97%
	(b) On Reproduction Cost New (4b ÷ 2)	4.73%		4.73%	4.51%		4.51%
	(c) On Reproduction Cost Less Depr.(4b÷3)	5.37%		5.37%	5.14%		5.14%
	Per Cent. Return After Giving Effect to Reduction in Net Revenues From Intrastate Operations Under Orders 24065 and 24985						
6	Reduction in Net Revenues			$ 850,000			$ 850,000
7	Net Telephone Revenues after deducting:						
	(a) Depreciation on Cost (4a - 6)			1,298,767			1,333,654
	(b) Depreciation on Value (4b - 6)			1,350,543			1,321,821
8	Per Cent. Return						
	(a) On Cost (7a ÷ 1)			2.96%			3.03%
	(b) On Reproduction Cost New (7b ÷ 2)			2.90%			2.75%
	(c) On Reproduction Cost Less Depr.(7b ÷ 3)			3.30%			3.13%

1416

C. & P. TEL. CO. OF B.C.
v. WEST et. al.
U.S DIST CT ED. NO 2240
Plaintiff's Exhibit 1-46
Witness GRETZ
Date ..... Rec'd .....

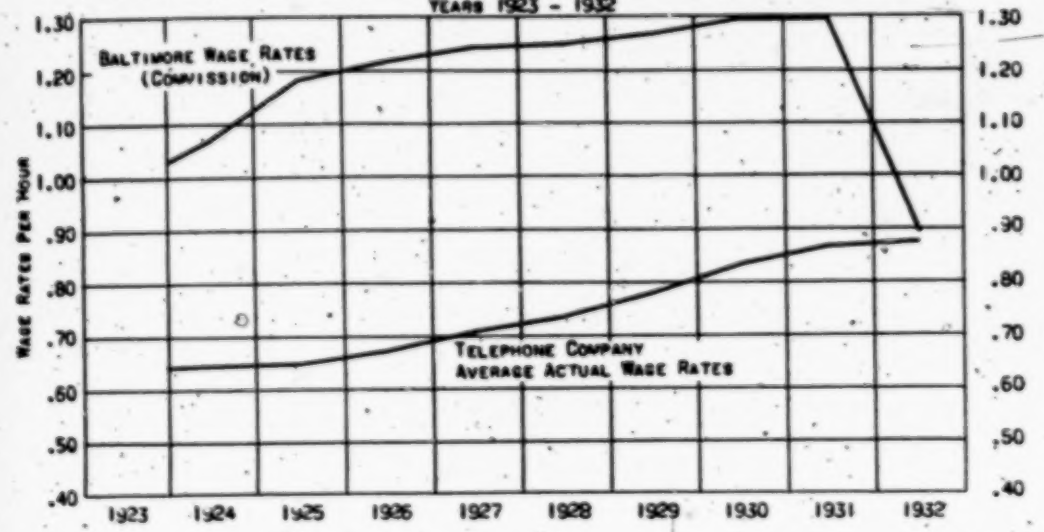
THE CHESAPEAKE AND POTOMAC TELEPHONE COMPANY OF BALTIMORE CITY

COMPARISON OF WAGE RATES

(WITH ILLUSTRATION OF ONE OF THE FALLACIES OF INDEX METHOD FOLLOWED BY COMMISSION)

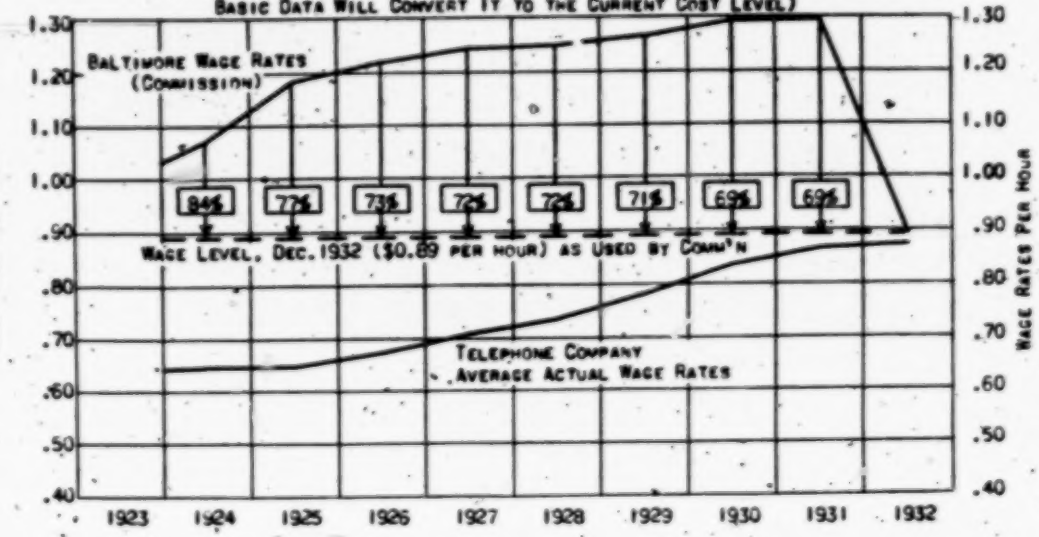
I

COMPARISON OF BASIC DATA FOR COMMISSION BALTIMORE WAGE TRANSLATORS (PAGE 26 OF OPINION, P.C. EX. 31) WITH TELEPHONE COMPANY AVERAGE ACTUAL WAGE RATES
YEARS 1923 - 1932



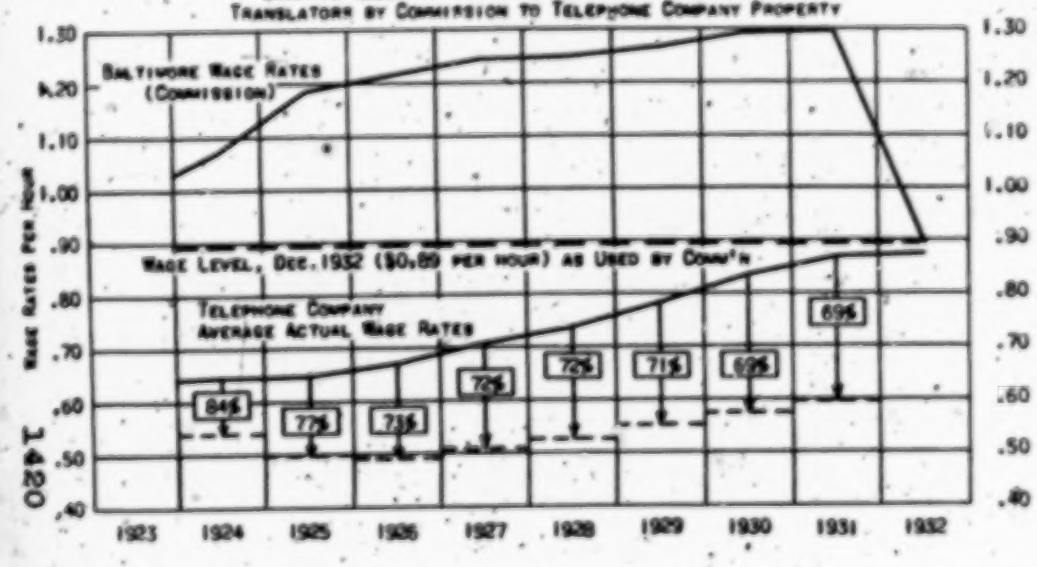
II

GRAPHIC ILLUSTRATION OF DERIVATION OF COMMISSION TRANSLATORS
(A TRANSLATOR REPRESENTS THE PERCENTAGE WHICH WHEN APPLIED TO THE BASIC DATA WILL CONVERT IT TO THE CURRENT COST LEVEL)



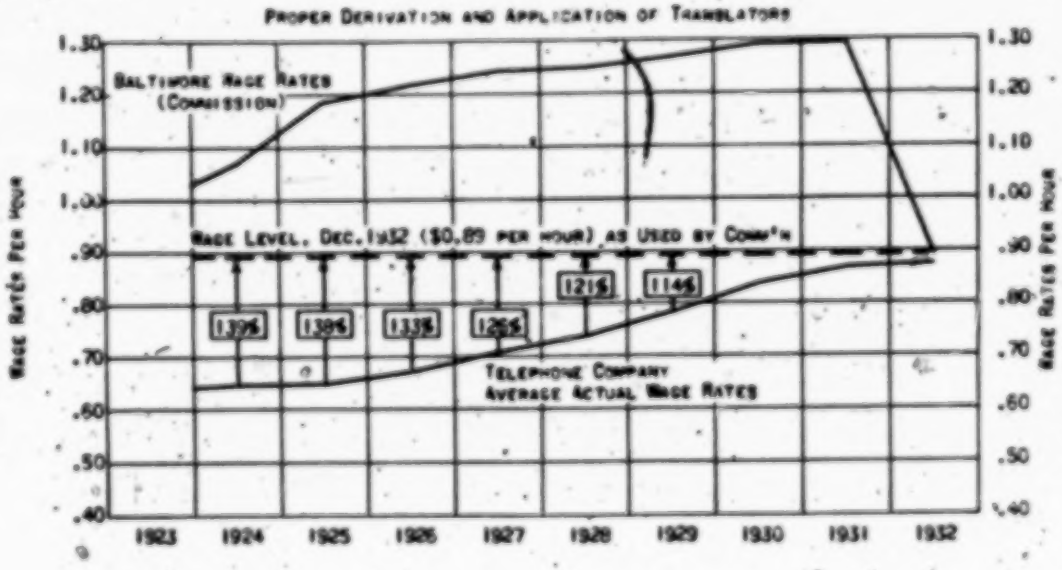
III

GRAPHIC ILLUSTRATION OF ERRONEOUS APPLICATION OF TRANSLATORS BY COMMISSION TO TELEPHONE COMPANY PROPERTY



IV

PROPER DERIVATION AND APPLICATION OF TRANSLATORS

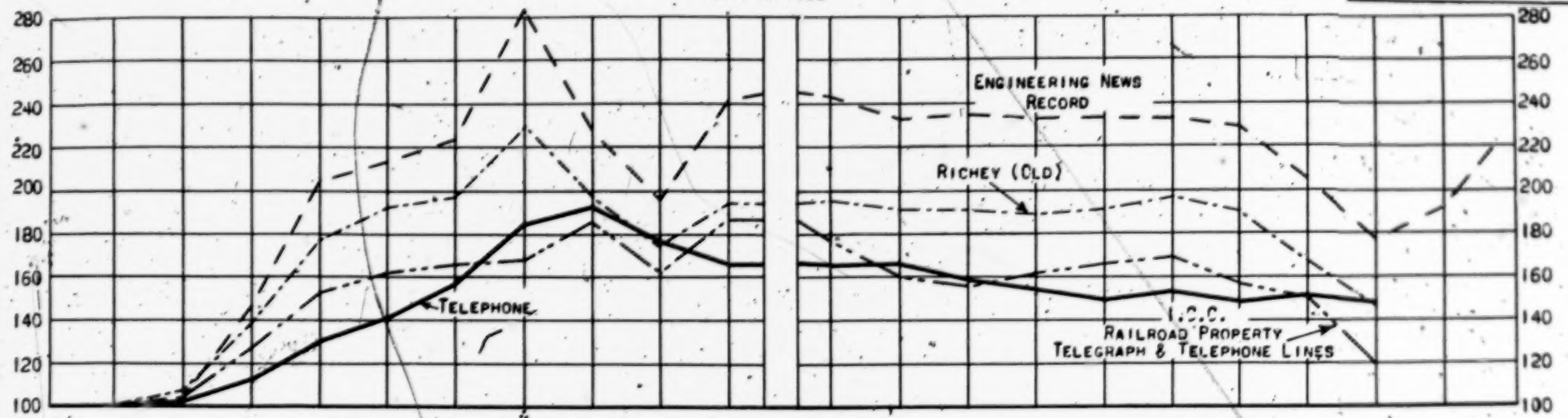


C & P. TEL. CO. OF B.C.
v. WEST et al
U. S. DIST. CT. EQ. No. 2240
Plaintiff's Exhibit A-47
Witness GRETZ
Date ____ Rec'd ____

THE CHESAPEAKE AND POTOMAC TELEPHONE COMPANY OF BALTIMORE CITY

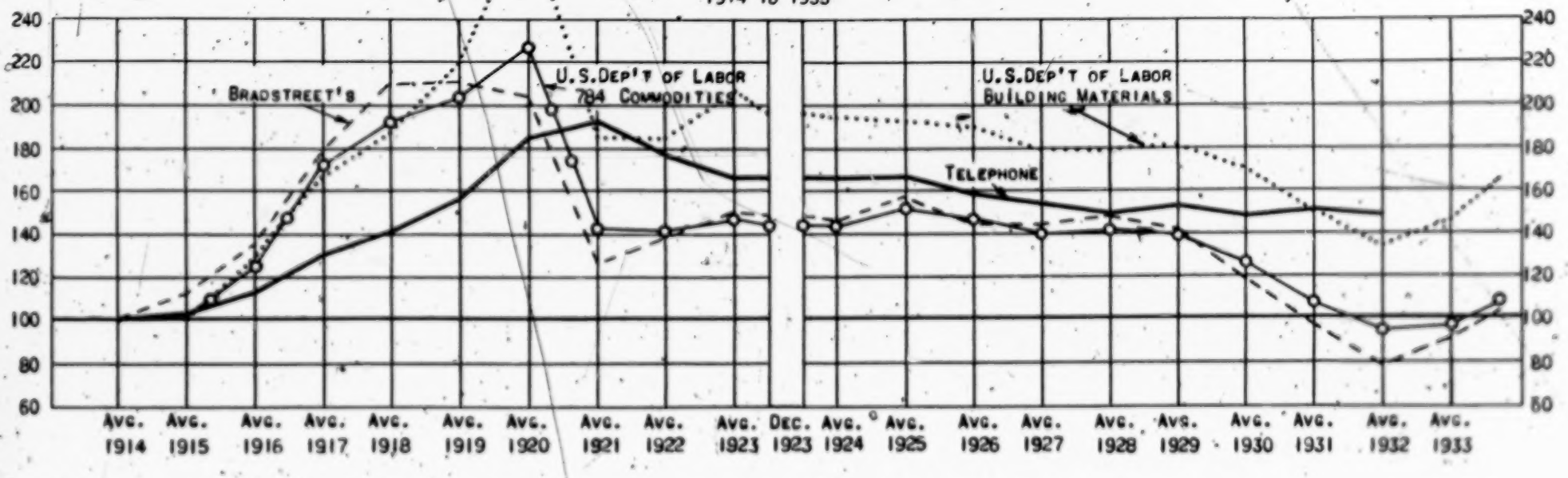
COMPARISON OF TELEPHONE CONSTRUCTION COSTS WITH CONSTRUCTION INDEXES USED BY COMMISSION
(AVERAGE 1914=100)

1914 TO 1933



COMPARISON OF TELEPHONE CONSTRUCTION COSTS WITH COMMODITY INDEXES USED BY COMMISSION
(AVERAGE 1914=100)

1914 TO 1933



1423

C & P TEL D OF C
v. WEST et al
U S DIST CT EQ No 2260
Plaintiff's Exhibit A-45
Witness GRETZ
Date ..... Rec'd .....

THE CHESAPEAKE AND POTOMAC TELEPHONE COMPANY OF BALTIMORE CITY

BOOK COST, 1914 AND NET ADDITIONS TRENDED TO 1923 AND 1932

(To illustrate the error of chaining one index to another without reconciliation.)

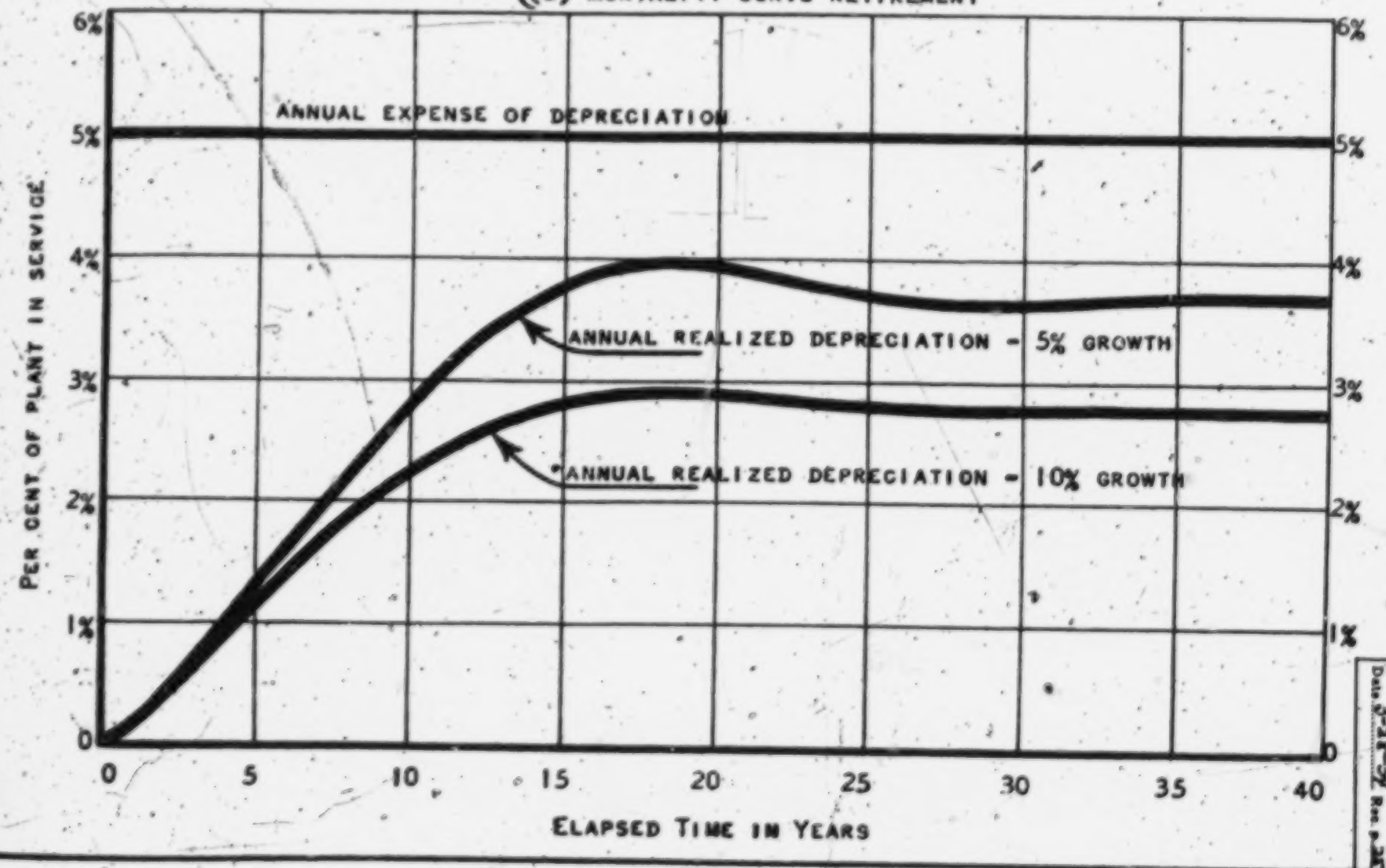
	Identification of Index	Going Value and Working Capital Excluded		
		Dec. 31, 1923 Using 1914 as Starting Point	Dec. 31, 1932	
			Using 1914 as Starting Point	Using Court's 1923 Value as Starting Point
		A	B	C
	USED BY COURT TO DECEMBER 31, 1923			
1	Bureau of Labor Statistics - All Commodities (404 Series)	33,644,852	(This series discontinued)	
	USED BY COMMISSION 1923 TO 1932			
2	Bureau of Labor Statistics - All Commodities (784 Series)	31,357,010	34,877,341	36,617,598
3	Bradstreet's	32,433,882	29,221,271	30,068,955
4	Engineering News Record	45,007,079	50,088,712	42,038,985
5	American Appraisal Company	44,240,774	46,061,002	39,187,841
6	Dr. Richey (Old Series)	38,514,988	46,299,660	42,946,720
7	Consolidated Engineering Company	45,605,982	49,059,749	40,983,003
8	Bureau of Labor Statistics - Building Materials	38,766,361	43,054,598	39,845,037
9	Federal Reserve Bank of New York	36,779,098	45,311,087	43,228,928
10	Interstate Commerce Commission - Telegraph and Telephone Lines - Railroads	40,376,222	42,518,229	38,466,456

Note: In making these calculations to illustrate an error in method, we used indexes which have been used by the Court and Commission, applied in the same way, without approving either the applicability of the particular index to the Telephone property or the method of applying the index numbers.

Page

EFFECT OF PLANT GROWTH ON ANNUAL REALIZED DEPRECIATION

BASIS OF CALCULATION
- (A) NEW PLANT INSTALLED IN FIRST YEAR WITH UNIFORM NET GROWTH THEREAFTER
- (B) 15 YEAR AVERAGE LIFE
- (C) 25% NET SALVAGE
- (D) MORTALITY CURVE RETIREMENT



C. & P. TEL. CO. OF B.C. v. WEST et al. U.S. DIST. CT. EQ. No. 2240
Witness Gammell Page
Date 3-28-52 Rec'd

14883

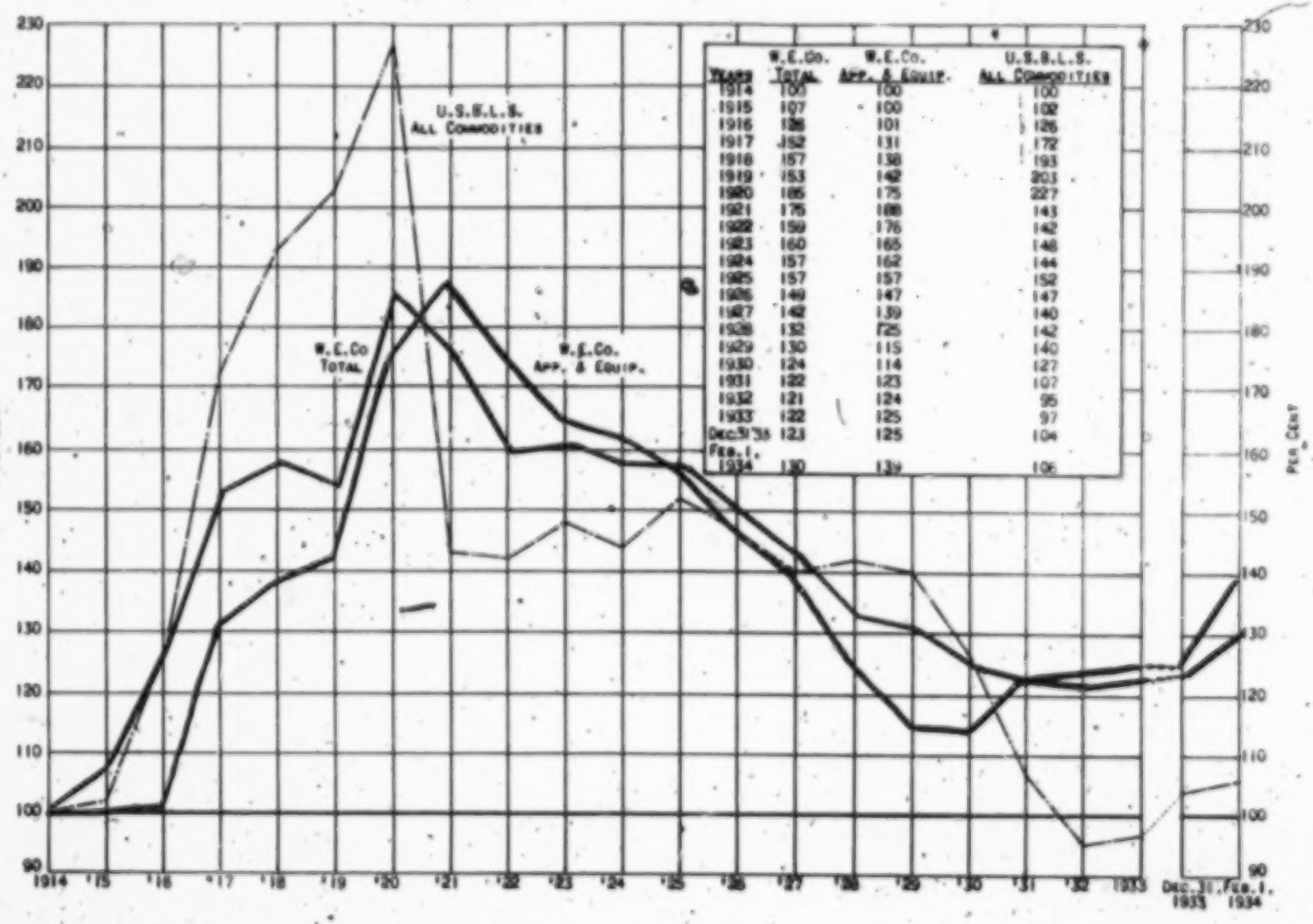
TREND OF WESTERN ELECTRIC COMPANY PRICES TO ASSOCIATED COMPANIES

ANNUAL AVERAGES 1914-1933, DEC. 31, 1933 AND FEB. 1, 1934

SHOWING ALSO

UNITED STATES BUREAU OF LABOR STATISTICS WHOLESALE COMMODITY PRICE TREND FOR ALL COMMODITIES

AVERAGE 1914 = 100



YEARS	W.E.Co. TOTAL	W.E.Co. APP. & EQUIP.	U.S.B.L.S. ALL COMMODITIES
1914	100	100	100
1915	107	100	102
1916	128	101	126
1917	152	131	172
1918	157	138	193
1919	153	142	203
1920	185	175	227
1921	175	188	143
1922	159	176	142
1923	160	165	148
1924	157	162	144
1925	157	157	152
1926	149	147	147
1927	142	139	140
1928	132	125	142
1929	130	115	140
1930	124	114	127
1931	122	123	107
1932	121	124	95
1933	122	125	97
Dec.31'33	123	125	104
Feb.1. 1934	130	132	106

C & P. TEL. CO. OF B.C. et WEST et. al. U.S. DIST. CT. EQ. No. 2240

Plaintiff's Exhibit ASG COX

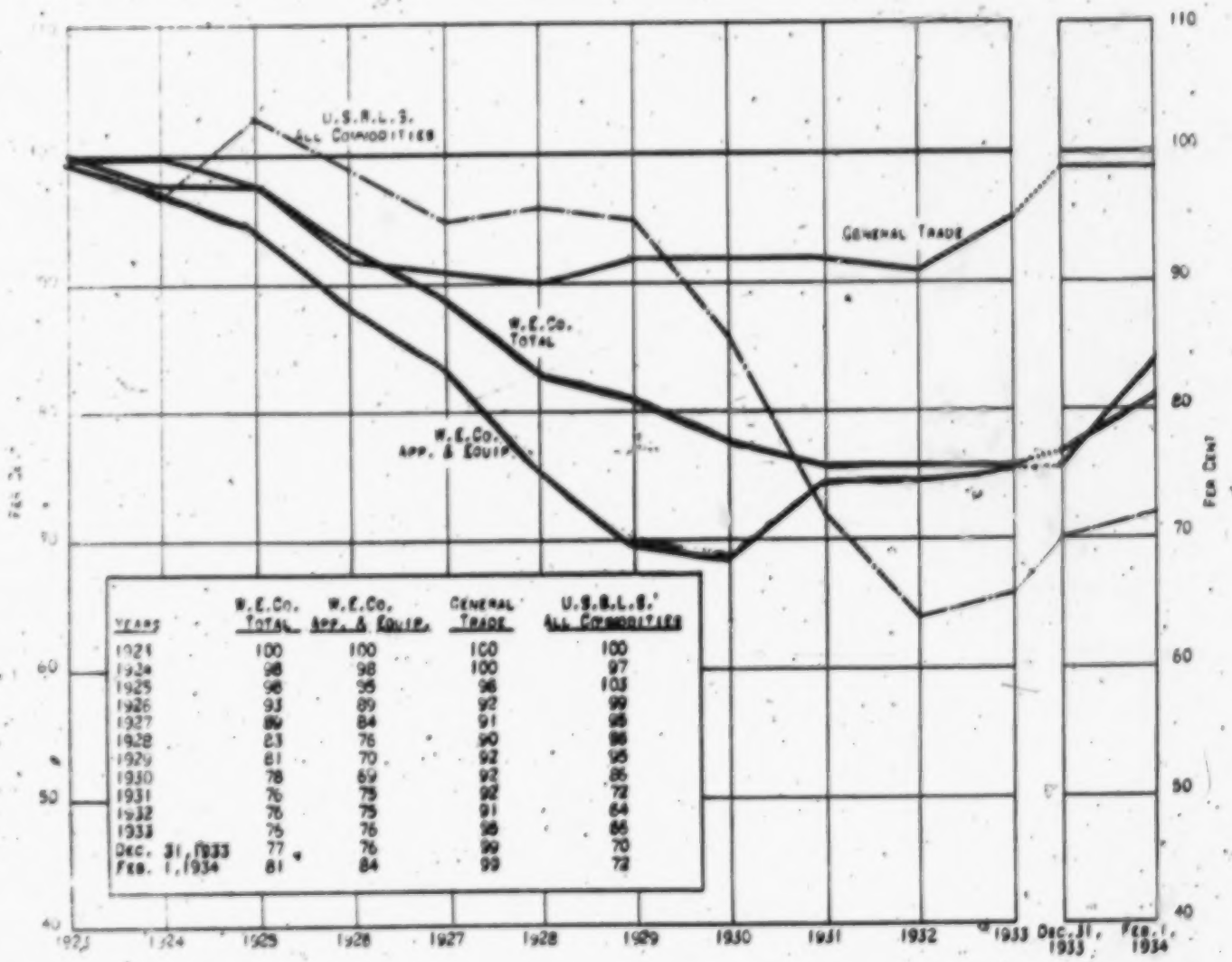
Witness

Date Rec'd

1424

No. 2850
MARCH 19, 1934.

TREND OF WESTERN ELECTRIC COMPANY PRICES TO ASSOCIATED COMPANIES
ANNUAL AVERAGES 1923-1933, DEC. 31, 1933 AND FEB. 1, 1934
SHOWING ALSO
UNITED STATES BUREAU OF LABOR STATISTICS WHOLESALE COMMODITY PRICE TREND FOR ALL COMMODITIES AND TREND OF PRICES IN THE GENERAL TRADE FOR CODED TELEPHONE APPARATUS AND STEP-BY-STEP EQUIPMENT COMPARABLE TO WESTERN ELECTRIC MANUFACTURES
AVERAGE 1923 = 100



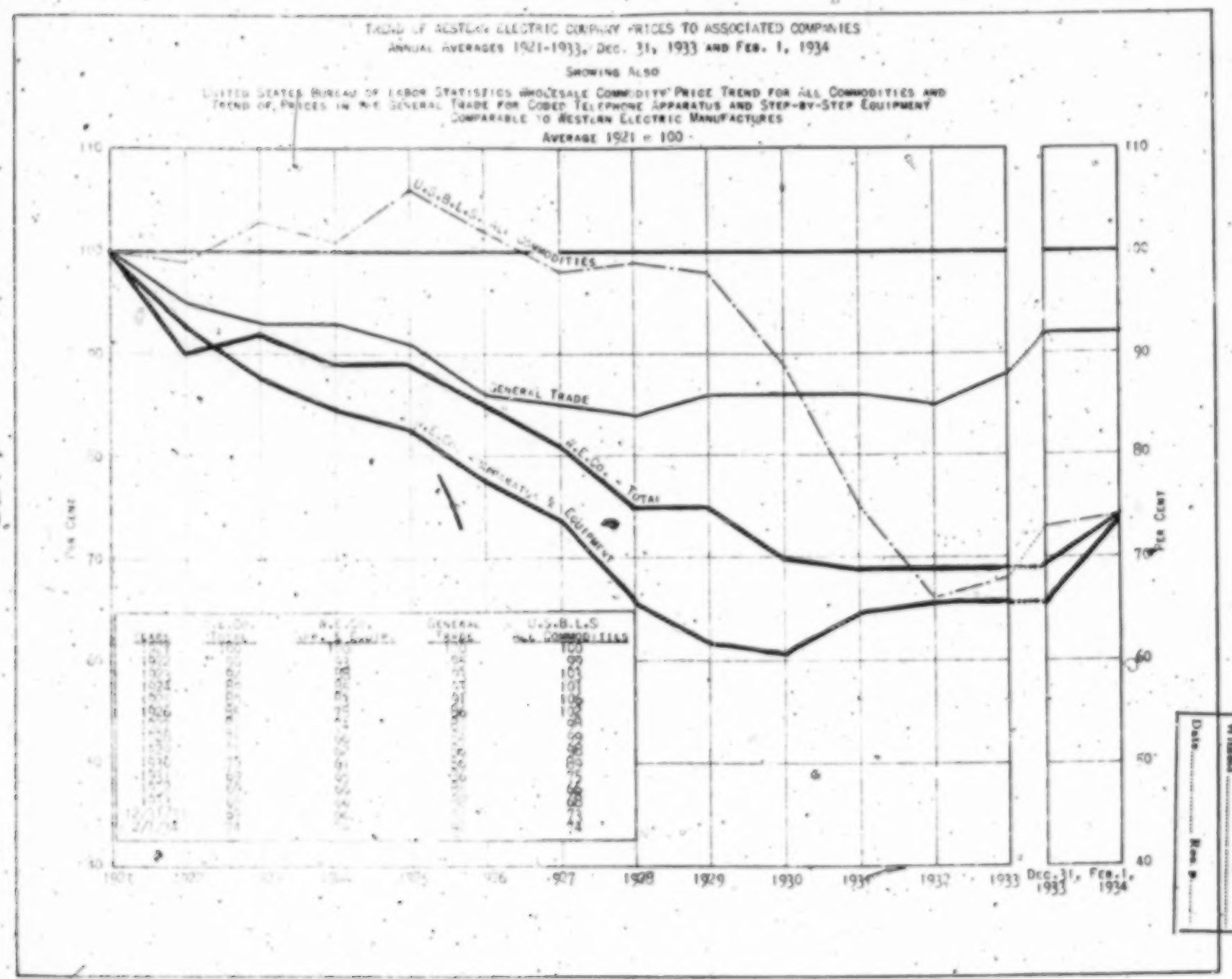
Years	W.E.Co. Total	W.E.Co. App. & Equip.	General Trade	U.S.B.L.S. All Commodities
1923	100	100	100	100
1924	98	98	100	97
1925	96	95	96	103
1926	93	89	92	99
1927	89	84	91	95
1928	83	76	90	96
1929	81	70	92	95
1930	78	69	92	86
1931	76	75	92	72
1932	76	75	91	64
1933	76	76	90	65
Dec. 31, 1933	77	76	89	70
Feb. 1, 1934	81	84	99	72

C. & P. TEL. CO. OF B.C. v. WEST et al. U.S. DIST CT E.D. NO 2240
Plaintiff's Exhibit ASL
Witness COX
Date
Rec'd

1425

No. 845
MARCH 19, 1934

TREND OF WESTERN ELECTRIC COMPANY PRICES TO ASSOCIATED COMPANIES
ANNUAL AVERAGES 1921-1933, DEC. 31, 1933 AND FEB. 1, 1934
SHOWING ALSO
UNITED STATES BUREAU OF LABOR STATISTICS WHOLESALE COMMODITY PRICE TREND FOR ALL COMMODITIES AND TREND OF PRICES IN THE GENERAL TRADE FOR CODED TELEPHONE APPARATUS AND STEP-BY-STEP EQUIPMENT COMPARABLE TO WESTERN ELECTRIC MANUFACTURES
AVERAGE 1921 = 100



	U.S.B.L.S. ALL COMMODITIES
1921	100
1922	99
1923	103
1924	102
1925	104
1926	103
1927	95
1928	96
1929	95
1930	86
1931	73
1932	65
1933	74
Dec. 31, 1933	78
Feb. 1, 1934	78

C & P. TEL. CO. OF B.C.
P. WEST vs. U.S. DIST. CT. EQ. NO. 2240
Plaintiff's Exhibit A-57
Witness Cox
Date ..... Rec'd .....

4426

No. 838-B
Feb. 20, 1934.

45—648

[fol. 1427]

PLAINTIFF'S EXHIBIT A-53

C. & P. TEL. CO. OF B. C. v. WEST et al. U. S. Dist. Ct. Eq. No. 2240

Witness: ——

Date: ——. Rec. p. —

Restatement of Defendant's Exhibit D-8, Page 2

(Dollars in Thousands)

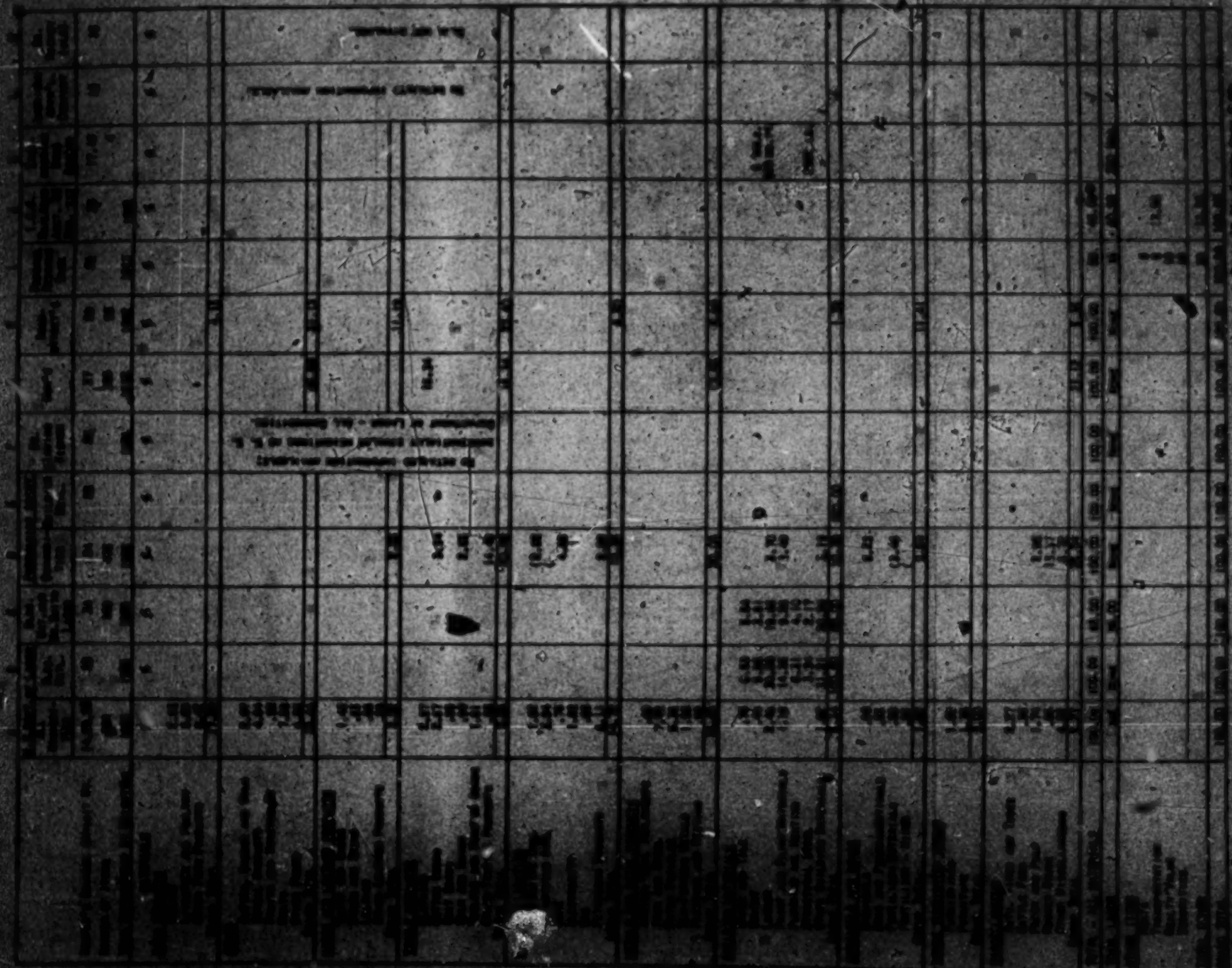
	1927	1928	1929	1930	1931	1932	Total
442 Industrial Companies for 1927 to 1931 and 433 Industrial Companies for 1932:							
Total Invested Capital	$25,558,000	$27,007,000	$29,235,000	$29,975,000	$28,812,000	$26,775,000	$167,362,000
Net Profits before Fixed Charges	2,216,000	2,865,000	3,248,000	1,932,000	819,000	201,000	11,281,000
Per Cent. Earned on Invested Capital	8.7	10.6	11.1	6.5	2.8	.8	6.7
Western Electric Co. Inc.*:							
Average Investment less Depreciation Reserve Account	$186,367	$156,143	$226,341	$285,900	$287,727	$263,464	$1,405,942
Net Earnings	19,197	22,925	32,293	20,611	16,088	(9,032)	102,082
Per Cent. Return	10.3	14.7	14.3	7.2	5.6	(3.4)	7.3

( ) Indicates loss.

* Total business of Western Electric Co., Inc.; Bell business not segregated.

807

(Here follow photographs of side folios 1428 and 1429)



I. C. C. Form No. 919

Owner _____

Operating Company _____

Division _____ State _____

Valuation Section No. _____

Form _____ By _____

_____ Miles Main Line _____ Miles all Tracks

INTERSTATE COMMERCE COMMISSION
BUREAU OF VALUATION

SUMMARY SHEET

Date of Inventory as of _____, 19__

Date Compiled _____, 19__

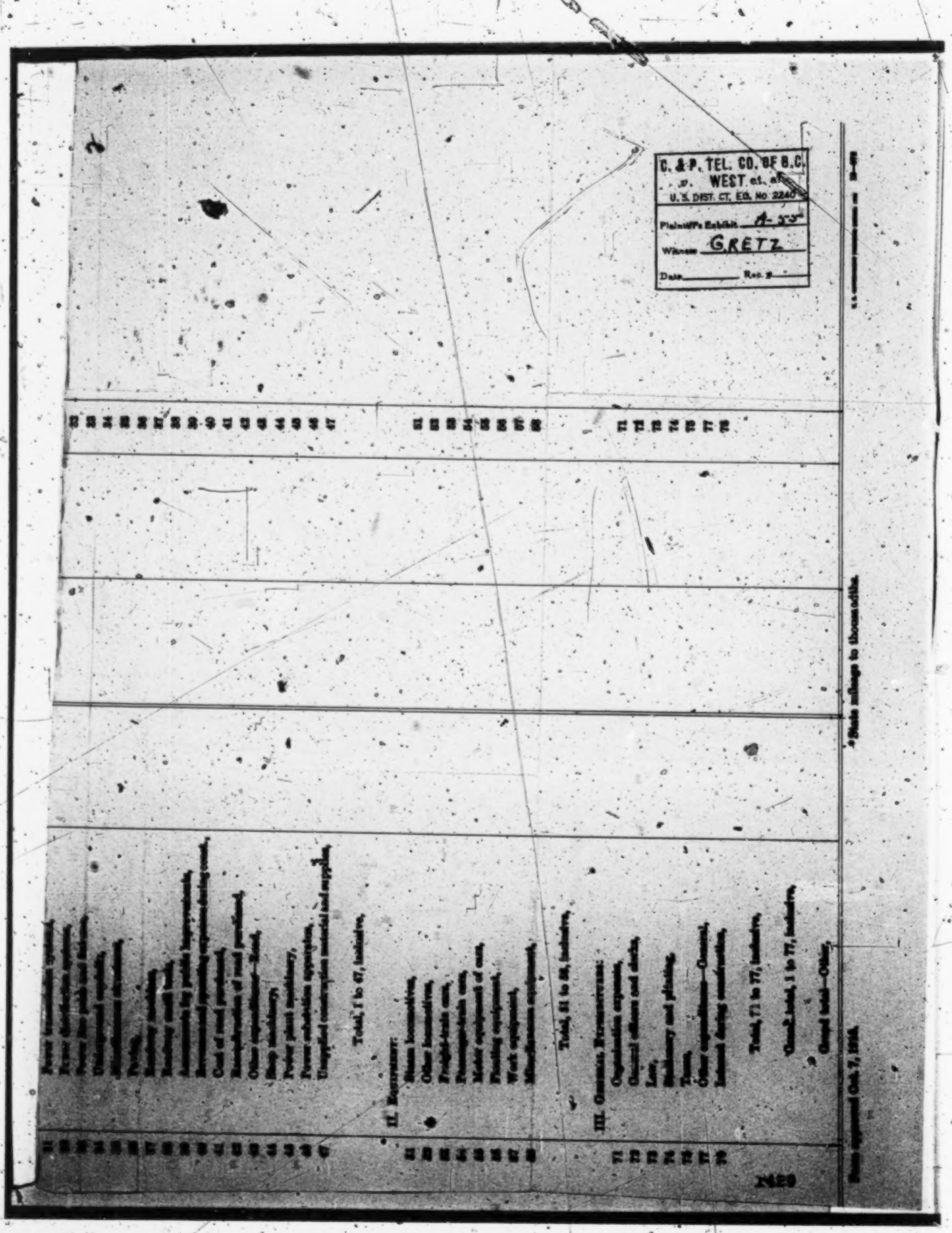
Compiled by _____

Correct _____
Engineer

Approved _____
Engineer

Primary Account Number (1)	(2) CLASSES	(3) ORIGINAL COST TO DATE	COST OF REPRODUCTION (4) New	COST OF REPRODUCTION (5) Less Depreciation	Primary Account Number (6)	(7) REMARKS
	I. Road:	$	$	$		
1	Engineering,				1	
2	Land for transportation purposes,				2	
3	Grading,				3	
4	Underground power tubes,				4	
5	Tunnels and subways,				5	
6	Bridges, trestles, and culverts,				6	
7	Elevated structures,				7	
8	Ties,				8	
9	Rails,				9	
10	Other track material,				10	
11	Ballast,				11	
12	Track laying and surfacing,				12	
13	Right-of-way fences,				13	
14	Snow and sand fences and sheds,				14	
15	Crossings and signs,				15	
16	Station and office buildings,				16	
17	Roadway buildings,				17	
18	Water stations,				18	
19	Fuel stations,				19	
20	Shops and engine houses,				20	
21	Grain elevators,				21	
22	Storage warehouses,				22	
23	Wharves and docks,				23	
24	Coal and ore wharves,				24	
25	Gas producing plants,				25	
26	Telegraph and telephone lines,				26	
27	Signals and interlockers,				27	
28	Water tanks, stacks, and pipe lines,				28	
29	Power plant buildings,				29	
30	Power substation buildings,				30	
31					31	

C. & P. TEL. CO. OF B.C.
v. WEST et. al.
U.S. DIST. CT. ED. NO 2240
Plaintiff's Exhibit A-375
Witness GRETZ
Date Rec'd



[fol. 1430] (2)

Photostatic Copy of Railroad Reproduction Cost Index Data of the Bureau of Valuation of the Interstate Commerce Commission used by Defendant's Witness Smith in the preparation of Exhibit D-5, pages 63 and 69, comprising:

(a) III—Tabulation of Indices by Years and by Accounts Applicable to the Central Eastern Region.

(b) Development of Computation Multipliers for Account 26—Telegraph and Telephone Lines, Central Eastern Region—III.

REGION III

Tabulation of Indices by Years and by Accounts
Applicable to the Central Eastern Region

The indices represent territorial index factors and are not applicable for use in the determination of unit reproduction costs upon individual roads.

Acct. No.	Per Cent	1915	'16	'17	'18	'19	'20	'21	'22	'23	'24	'25	'26	'27	'28	'29	'30	'31	'32
1	2.64	102	111	136	160	179	212	175	159	172	171	167	166	165	164	161	156	148	131
2	13.64	100	110	149	164	189	250	170	143	159	160	180	152	142	134	132	132	117	106
4																			
5	2.56	102	112	114	154	170	161	170	170	170	168	158	157	150	142	134	128	123	119
6	9.23	106	118	151	169	183	210	162	161	177	173	171	170	168	168	165	156	146	131
7	0.10	102	126	159	177	184	210	150	153	173	171	168	168	163	163	162	154	144	129
8	4.07	99	200	110	123	135	190	160	150	170	170	165	165	172	175	175	170	156	145
9	5.98	100	103	118	152	160	170	138	141	149	148	147	147	147	147	147	147	147	143
10	2.80	101	122	167	197	206	209	201	166	168	182	179	179	179	179	174	178	170	171
11	4.01	105	113	136	157	164	212	198	161	179	180	179	178	178	178	182	182	182	173
12	3.48	100	100	138	145	160	192	161	145	171	171	171	171	171	171	171	170	169	164
13	0.22	100	134	138	179	204	235	181	168	180	179	182	182	178	178	178	170	161	136
14	-	102	104	108	158	193	225	203	189	199	191	192	192	192	192	193	186	177	180
15	1.29	102	106	132	160	181	209	178	168	180	178	170	169	166	166	166	162	154	139
16	4.52	101	118	138	154	185	216	193	181	196	194	189	186	180	180	187	182	170	150
17	0.37	100	118	138	155	188	219	195	181	199	199	196	190	186	191	190	187	173	150
18	0.65	101	121	161	170	196	218	186	178	188	188	187	185	186	186	194	181	169	135
19	0.19	101	120	153	160	190	215	161	166	186	186	182	180	188	188	188	177	166	135
20	2.26	108	119	141	159	188	217	196	182	196	194	190	186	180	189	187	178	171	150
21	0.12	100	110	128	150	168	218	190	185	197	197	198	190	196	193	198	186	176	159
22	0. 7	100	115	138	158	188	220	198	180	400	200	198	190	196	190	190	187	174	159
23	0.64	100	114	134	154	178	204	167	158	178	178	174	178	178	178	178	173	162	138
24	0.61	101	116	141	162	188	207	170	161	177	177	178	178	176	176	176	174	163	139
25	0.01	118	127	138	167	201	226	218	188	200	200	200	201	200	200	200	200	200	148
26	0.39	104	120	138	168	166	189	186	165	187	178	180	184	182	186	189	187	181	180
27	1.21	98	104	132	152	161	182	168	163	172	170	169	169	164	168	160	151	137	124
28																			
29	0.21	104	125	142	159	190	219	196	184	197	197	192	187	188	191	188	185	171	148
30	0.01	101	117	137	156	187	219	194	180	197	197	192	188	188	190	186	183	169	148
31	0.03	118	168	191	181	165	177	165	138	141	134	138	140	136	139	148	138	118	97
32	0.18	109	149	188	194	190	209	171	162	179	173	176	177	176	179	181	178	148	125
33	0.04	106	116	150	164	196	221	206	193	207	208	178	180	208	209	218	206	176	134
34	0.02	101	116	116	172	204	220	218	214	220	218	220	226	218	220	219	220	178	144
35	0.05	101	117	137	156	187	219	194	180	197	197	192	188	188	190	186	183	169	148
36	0.03	100	100	138	160	190	206	178	176	178	178	177	177	178	178	178	178	178	167	150
37	0.04	114	128	154	180	190	206	190	173	178	178	174	174	174	178	178	174	174	174	136
38	0.06	100	100	178	202	184	202	182	170	178	188	190	190	191	191	191	190	182	180
44	1.09	118	136	158	198	201	211	197	178	188	188	188	188	188	188	188	188	188	188
45	0.35	118	136	158	198	203	216	204	180	188	188	188	188	188	188	188	188	188	188
46	0.18	118	136	158	198	196	200	180	158	168	168	168	168	168	168	168	168	168	148
Wtd. Avg. 1-46	65.95	102	111	134	160	179	212	175	159	172	171	167	166	165	164	161	156	148	131

810A

Tabulation of Indices by Years and by Accounts Applicable to the Central Eastern Region

The indices represent territorial index factors and are not applicable for use in the determination of unit reproduction costs upon individual roads.

Acct.	Per Cent	1913	'14	'15	'16	'17	'18	'19	'20	'21	'22	'23	'24	'25	'26	'27	'28	'29	'30	'31
EQUIPMENT																				
51	7.6	91	150	191	188	193	233	179	167	186	191	181	179	200	206	206	200	192		
52	0.07	109	117	127	134	134	218	135	135	136	137	130	137	200	200	200	200	200		
53	17.84	101	149	183	243	266	272	177	157	196	186	172	182	177	177	176	176	176		
54	2.84	89	104	138	164	197	219	136	134	136	134	131	131	168	169	169	178	178		
55	0.05	97	107	131	167	172	198	186	172	177	179	186	186	176	176	176	176	176		
56	0.80	107	125	164	227	245	239	200	178	170	170	170	170	170	170	170	170	170		
57	0.48	96	146	162	223	242	258	186	169	197	186	181	182	182	182	182	182	182		
58	0.01	94	98	97	105	131	148	137	110	106	108	108	97	97	106	111	111	111		
Wtd. Avg. 51-58	29.43	97	139	180	221	240	255	176	165	194	187	176	186	186	186	186	179	186		
GENERAL EXPENDITURES																				
71-76																				
& 77	0.77	102	111	134	160	178	212	178	189	172	171	167	166	165	164	161	165	165		
76	6.75	102	113	137	164	182	216	175	189	174	172	168	167	166	166	166	166	166		
Wtd. Avg. 71-77	7.51	102	113	137	164	182	216	176	189	174	172	168	167	166	166	163	167	166		
1-46	65.06	102	111	134	160	179	212	178	188	172	171	167	166	165	165	161	165	165		
51-58	29.43	97	139	180	221	240	255	176	165	194	187	176	186	186	186	186	179	186		
71-77	7.51	102	113	137	164	182	216	176	189	174	172	168	167	166	166	163	167	166		
Wtd. Avg. 1-77	100	101	119	148	178	197	225	175	161	179	176	170	172	171	170	168	168	184		

[fol. 1433]

(5)

Interstate Commerce Commission, Bureau of Valuation
Telegraph and Telephone Branch, Engineering Section
Development of Composite Multipliers for Account 26—Telegraph and Telephone Lines
Central Eastern Region—3
Ex Parte #103. Witness: ——. Date: ——

Year	Material					Freight and distribution	Labor of installation	Composite multiplier
			Wire					
	Tele. equipt.	Pole line	Iron #8 BWG	Copper #9 B&S	Misc.			
	Per Cent of Amount in Engineering Report							
1910–14	7.28	19.65	3.63	17.53	12.56	11.44	27.91	100
	Multipliers							
1914	100	100	100	100	100	100	100	100
1915	104	116	114	82	103	105	108	104
1916	116	128	146	159	122	105	123	128
1917	125	144	170	222	164	116	132	153
1918	145	157	179	180	158	136	168	162
1919	143	186	173	132	157	151	190	166
1920	151	237	177	137	222	163	198	188
1921	174	255	161	100	172	202	191	186
1922	184	180	123	91	156	196	184	163
1923	169	278	130	106	191	187	183	187
1924	147	244	135	100	189	187	187	178
1925	161	131	120	104	209	187	189	160
1926	139	129	113	102	185	187	193	156
1927	144	180	106	93	168	187	193	162
1928	182	194	102	103	165	187	197	166
1929	118	191	102	126	167	187	195	169
1930	115	184	102	98	131	187	191	157
1931	114	180	98	72	132	187	189	151
1932	95	110	94	40	120	146	176	120

[fol. 1424] (6)

Photostatic Copy of Tabulation of Cost Data Used by the Bureau of Valuation of the Interstate Commerce Commission in the Compilation of the Composite Multipliers for Railroad Account 26, comprising:

(a) "Unit Prices for Certain Items in Account 26"—Telegraph and Telephone Lines—Central Eastern Region—III.

(b) Multipliers used in Computing Composite Multipliers for Account 26—Telegraph and Telephone Lines, Central Eastern Region—III.

Interstate Commerce Commission, Bureau of Valuation

Telegraph and Telephone Branch, Engineering Section

Unit Prices for Certain Items in Account 26—Telegraph and Telephone Lines

Central Eastern Region—3

Ex Parte # 103. Witness: ——. Date: ——

Item	Typical Tele. Inst.	Wire		Poles (Average 25 ft.—Class C)							Labor per productive man hr.
Year		Iron #8 BWG	Copper #9 B&S	East. cedar	East. chest.	South. chest.	Western cedar	Sawn redwood	Creo. pine	Black cypress	
Units	each	cwt.	cwt.	each	each	each	each	each	each	each	hour
1914	$48.1	$8.65	$15.5	$1.64	$1.60	$1.20	$2.00	$2.50	$4.81	$1.50	$.827
1915	48.6	4.16	12.7	1.90	1.42	.96	1.90	3.23	4.57	.....	.899
1916	53.4	5.33	24.7	2.10	1.55	1.12	1.74	2.30	4.67	1.89	.643
1917	54.4	6.21	24.5	2.86	1.73	1.12	2.16	2.33	5.82	1.74	.886
1918	66.5	6.53	27.9	2.57	1.97	1.30	2.86	2.85	6.30	2.94	.853
1919	58.2	6.81	20.5	3.05	2.51	1.62	3.24	3.53	5.44	2.70	1.001
1920	67.9	6.45	21.3	3.89	2.33	1.67	5.72	7.73	11.5	3.44	1.016
1921	80.4	5.85	16.9	4.18	3.04	1.81	5.94	6.55	10.9	3.50	1.006
1922	98.4	4.49	14.1	2.95	2.74	1.66	3.96	4.23	5.29	3.62	.909
1923	83.3	4.75	16.5	4.56	2.96	1.64	4.70	7.30	6.11	3.50	.964
1924	78.0	4.98	15.5	4.00	3.46	1.68	4.42	6.55	5.80	4.16	.988
1925	80.4	4.38	16.1	2.14	3.17	1.79	4.43	5.73	7.79	3.43	.966
1926	66.5	4.12	15.8	2.12	3.09	1.88	3.82	6.43	8.13	3.89	1.016
1927	68.5	3.87	14.4	2.95	3.01	1.92	4.64	6.43	8.61	4.08	1.016
1928	57.3	3.72	16.0	3.18	2.54	1.88	4.78	5.88	8.43	4.43	1.037
1929	55.3	3.72	19.6	3.13	2.54	1.87	4.70	5.80	8.98	4.25	1.037
1930	55.4	3.72	15.2	3.08	2.40	1.79	4.44	5.25	7.55	4.11	.943
1931	54.9	3.58	11.2	2.92	2.38	1.74	4.36	5.12	7.80	4.08	.996
1932	45.7	2.43	6.2	1.80	2.24	1.44	3.40	4.62	4.57	3.39	.928

Interstate Commerce Commission, Bureau of Valuation

Telegraph and Telephone Branch, Engineering Section

Multipliers Used in Computing Composite Multipliers for Account 26—Telegraph and Telephone Lines

Central Eastern Region—3

Ex Parte #103. Witness:——. Date:——

Item

Year	Typical Tele. Inst.	Wire		Poles (Average 25 ft.—Class C)							Labor per productive man hr.
		Iron #8 BWG	Copper #9 B&S	East. cedar	East. chest	South chest	Western cedar	Sawn redwood	Creo. pine	Black cypress	
1914	100	100	100	100	100	100	100	100	100	100	100
1915	101	114	82	116	89	80	95	129	95		106
1916	111	146	159	128	97	93	87	88	97	106	123
1917	113	170	222	144	108	93	106	133	121	116	132
1918	136	179	180	157	123	108	143	115	131	136	168
1919	131	173	132	186	157	127	162	142	173	180	189
1920	141	177	137	237	177	139	296	309	228	229	193
1921	167	161	109	255	190	151	297	262	226	233	191
1922	194	123	91	180	171	138	199	193	110	242	184
1923	171	130	106	278	186	137	235	202	127	253	183
1924	162	135	100	244	216	140	221	274	183	277	187
1925	167	120	104	131	198	149	224	229	162	232	189
1926	136	113	102	129	193	157	176	257	169	206	193
1927	132	106	93	180	191	160	232	257	179	272	193
1928	119	102	103	194	159	157	239	223	175	295	197
1929	116	102	126	191	159	156	235	220	168	290	195
1930	115	102	98	185	150	149	222	210	159	274	191
1931	114	98	72	178	149	145	218	205	156	270	189
1932	95	94	40	110	140	120	170	185	95	226	176

[fol. 1437] PLAINTIFF'S EXHIBIT A-56

C. & P. TEL. CO. OF B. C. v. WEST et al. U. S. Dist. Ct. Eq. No. 2240

Witness: Gretz

Date: ——. Rec. p. —

The Chesapeake and Potomac Telephone Company of Baltimore City

Comparison of One of Commission's "Suggested Values" with Telephone Company's Evidences of Value

(Comparison Available Only for December 31, 1932)

		A	B	C
		December 31, 1932		
		Company		Commission
		Book cost Ex. A-1 and A-33	Reproduction cost Ex. A-30	One suggested Value* Ex. D-5, page 69 and Ex. D-10
1	Land	$661,423	$648,068	$456,489
2	Buildings	2,882,044	2,696,170	2,517,812
3	Central Office Telephone Equip. and Other Equip. of Central Offices	11,906,402	10,421,654	8,591,578
4	Poles	5,387,086	5,560,845	4,030,830
5	Aerial, Underground and Sub. Cable	12,656,941	10,840,873	10,263,211
6	Station Equip. and Multi. P.B.X.'s	7,153,860	7,280,936	6,056,942
7	Aerial Wire	3,244,874	2,199,866	2,737,969
8	Underground Conduit	4,002,765	4,549,490	4,359,079
9	Right of Way	934,220	934,220	934,220
10	General Equipment	791,073	672,412	672,412
11	Interest during Construction	337,637	2,406,587	337,637
12	Total Physical Property	$49,958,325	$48,211,121	$40,958,179
13	Intangible Capital	33,622	xxx	xxx
14	Working Capital	1,615,000	1,615,000	736,820
15	Going Value	xxx	4,500,000	732,000
16				
17	Depreciation	.....	$54,326,121‡	$42,426,999
			6,360,002	8,380,043
18	Book Cost (plus Working Capital)	$51,606,947‡		
19	Reproduction Cost Less Depreciation (plus Working Capital)	.....	$47,966,119‡	
20	Commission's Suggested Value Less Depreciation (including Working Capital)	.....	.....	$34,046,956*
21	Rate Base Dec. 31, 1932, fixed by Commission (Opn. p. 44)			$33,210,000

* This "suggested value" is the only one available by accounts for the purpose of comparison.

† Undistributed Construction Costs other than Interest During Construction apportioned over Directly Distributed Costs.

‡ Evidences of Value as summarized on Ex. A-44, Column A.

[fol. 1438] DEFENDANTS' EXHIBITS

[fol. 1439] DEFENDANTS' EXHIBIT D-2

Brief Historical Outline of the Chesapeake and Potomac Telephone Company of Baltimore City, with Particular Reference to its Relations to the Public Service Commission of Maryland

[fol. 1440]

I

General

It appears that the first complete sentence was transmitted by telephone in the year 1876. In 1880 there were 30,872 Bell telephones in the United States.

In 1884, The Chesapeake and Potomac Telephone Company of Baltimore City was incorporated under the laws of Maryland. By 1888, and perhaps prior thereto, this Company was operating. At that time, its capital stock consisted of 200 shares of the par value of $50.00 a share and all of the capital stock, except qualifying shares, was owned by The Chesapeake and Potomac Telephone Company, a New York corporation. It appears that in 1888 the telephone instruments were owned by the American Bell Telephone Company.

In 1901, the Chesapeake and Potomac Telephone Company of Baltimore City had property in Carroll, Frederick, Washington, Allegany, Anne Arundel, Montgomery, Prince George, Howard and Baltimore Counties and in Baltimore City. By 1910, in addition to the above Counties and City, the Company had property in Garrett, Harford and Washington Counties.

As of June 30, 1910, The Chesapeake and Potomac Telephone Company of Baltimore City and The Chesapeake [fol. 1441] and Potomac Telephone Company (a New York corporation) filed a consolidated report with the Public Service Commission of Maryland. This report stated that the New York corporation was incorporated July 2, 1883. Its report disclosed also that the Chesapeake and Potomac Telephone Company owned, as of June 30, 1910, 9,985 shares, out of a total outstanding of 10,000 shares, of stock of the Maryland Telephone Company of Baltimore City.

The above mentioned report also contains the following statistics:

Cost of Plant in Maryland	$8,075,284.14
Loss Depreciation	1,395,409.10
Cost less Depreciation	$6,679,875.04
Number of stations in Maryland	56,363

There were listed 69 buildings in Maryland containing Central Office Equipment.

The report indicated also that The Chesapeake and Potomac Telephone Company of Baltimore City had acquired the properties of the following telephone companies on the dates mentioned:

Baltimore and Bel Air Telephone Company of Harford County, 1908.

Baltimore, Annapolis and Drum Point Telephone Company of Baltimore City, 1908.

Howard Telephone and Electric Lighting Company, 1902.

Frederick County Telephone Company, 1910.

[fol. 1442] According to a report of the State Tax Commissioner filed with the Legislature in January, 1910, the following telephone companies paid the gross receipts tax shown opposite their respective names for the year 1909:

1. American Telephone & Telegraph Company	$167.95
2. Carroll County Telephone Company	15.70
3. Cecil Farmers Telephone Company	57.78
4. Chesapeake and Potomac Telephone Company	31,868.38
5. Cumberland Valley Telephone Company of Baltimore City	535.51
6. Citizens Telephone Company of Howard County	30.52
7. Diamond State Telephone Company	1,860.05
8. Farmers & Merchants Telephone Company	183.98
9. Farmers Telephone Company	4.42
10. Frederick County Telephone and Telegraph Company	500.00
11. Garrett County Telephone Company	77.42
12. Highland Telephone Company	54.82
13. Mapleville Telephone Company	2.24

14. Maryland Telephone Company	7,300.87
15. Mutual Telephone Company of Garrett County	2.40
16. Oriole Telephone Company	1.90
17. Pocomoke Telephone Company	92.30
[fol. 1443] 18. Ringgold Telephone Company	0.21
19. Rock Creek & Marley Telephone Company	42.00
20. Silver Run Telephone Company	5.94
21. Southern Maryland Telephone Company	73.37
22. Union Telephone Company	24.75
23. Western Maryland Telephone Company	983.94

It is interesting to note that for the year 1932 only the following corporations, in addition to The Chesapeake and Potomac Telephone Company of Baltimore City, made reports to this Commission. The figures after the respective names represent the cost of fixed capital as of December 31, 1932.

The Cecil Farmers Telephone Company	$41,695.16
Cumberland & Pennsylvania Railroad Company	4,223.22
Maryland and Delaware Telephone and Telegraph Company	13,311.21
The South Dorchester Telephone Company	6,810.18

The following is a list of Commission cases in which The Chesapeake and Potomac Telephone Company of Baltimore City and the Chesapeake and Potomac Telephone Company were authorized to acquire properties:

[fol. 1444] Case No. 145 (1911). Authorizing The Chesapeake and Potomac Telephone Company (N. Y.) to purchase the capital stock of the Western Maryland Telephone Company of Allegany County for $40,000.00 cash, $40,000 common stock and the assumption of $165,000 outstanding bonds.

Case No. 367 (1912). Authorizing The Chesapeake and Potomac Telephone Company of Baltimore City, hereinafter referred to as The Company, to acquire from the Diamond State Telephone Company certain property of the latter located in Maryland for a total consideration of $765,580.88.

Case No. 583 (1913). Authorizing the Company to purchase the property of the Dry Run Telephone Company of Washington County for $2,300.00.

Case No. 604 (1913). Authorizing the Company to purchase all outstanding stock of Farmers and Merchants Telephone Company of Caroline County for $59,445.00.

Case No. 626 (1913). Authorizing the Company to purchase property of Severna Park Telephone and Telegraph Company for $900.00.

Case No. 651 (1913). Authorizing the Company to purchase for $245,000.00 the property of the Western Maryland Telephone Company of Allegany County.

[fol. 1445] Case No. 740 (1914). Authorizing the Company to purchase the property of Rock Creek and Marley Telephone Company of Anne Arundel County for $7,750.00.

Case No. 741 (1914). Approval was given the Company to purchase outstanding capital stock of Highland Telephone Company of Harford County for $49,000. (Capital stock on books was $20,000). For the $49,000 there was acquired property of $19,000 and bonds of another company of $30,000.

Case No. 772 (1914). Authorizing the Company to acquire, for $15,000, the property of the Southern Maryland Telephone Company.

Case No. 773 (1914). Authorizing the Company to acquire property of Farmers and Merchants Telephone Company of Caroline County for $59,445.

Case No. 1068 (1916). Authorizing the Company to purchase the Pocomoke Telephone Company of Pocomoke City for $25,000.

Case No. 1108 (1916). Authorizing the Company to purchase the Cecilton and Earlville Telephone Company of Cecil County for $1,600.

Case No. 1380 (1917). Authorizing the Company to acquire property of Mapleville Telephone Company of Washington County for $350.00

[fol. 1446] Case No. 1449 (1917). Authorizing the Company to acquire the property of McDonough Rural Telephone Company.

Case No. 1564 (1918). Authorizing the Company to purchase the property of the Maryland Telephone Company.

Case No. 1639 (1919). Authorizing the Company to buy the Princess Anne Telephone Company of Somerset County for $1,800.

Case No. 1988 (1922). Authorizing the Company to purchase the property of the Cumberland Valley Telephone Company of Baltimore City for $45,000.

Case No. 2027 (1922). Authorizing the Company to acquire the property of The Garrett County Telephone Company for $1,200.

Case No. 3172 (1930). Authorizing the Company to purchase the property of the Union Telephone Company of Baltimore County for $4,400.

On March 15, 1913, the Uniform System of Accounts for Telephone Companies, compiled by the Interstate Commerce Commission, was approved as applicable to the Company by the Public Service Commission of Maryland. (Case No. 562.)

[fol. 1447]

II

Financial History

The Chesapeake and Potomac Telephone Company of Baltimore City was incorporated in the State of Maryland on March 8th, 1884, with an authorized capital of $10,000 common stock.

In its report as of June 30, 1913, to the Commission, the Company showed capital stock outstanding $10,000 and a total debt of $9,721,622.52.

In Case No. 690, Mr. Frank H. Bethell, the then President of The Chesapeake and Potomac Telephone Company of Baltimore City, President of The Chesapeake and Potomac Telephone Company of New York, President of The Chesapeake and Potomac Telephone Company of Virginia, President of The Bell Telephone Company of Pennsylvania, President of the Central District Telephone Company, President of the Delaware and Atlantic Telephone and Telegraph Company, and President of the Maryland Telephone Company, testified on June 30th, 1915, that:

"It [American Telephone and Telegraph Company] holds the entire capital stock of the New York Telephone Company, which company in turn owns the capital stock of the Bell Telephone Company of Pennsylvania, practically all of it. Some is held by the public. The capital stock of the Chesapeake and Potomac, the New York corporation, is held in part by the Bell of Pennsylvania and

in part by the New York Telephone Company, but boiled down the ownership runs to the American Telephone and Telegraph Company of all of the Associated Companies."

[fol. 1448] The capital stock of The Chesapeake and Potomac Telephone Company of Baltimore City was at the time of the testimony of Mr. Bethell owned by the Chesapeake and Potomac Telephone Company of New York, which Mr. Bethell said was owned jointly by the Bell Telephone Company of Pennsylvania and the New York Telephone Company.

On July 16th, 1918, the Company requested authority of the Commission (Case No. 1564) to issue additional capital stock in the amount of $14,490,000. On July 31st, 1918, the Commission granted the request of the Company, the order in part reading as follows:

"That the issue by said The Chesapeake and Potomac Telephone Company of Baltimore City of its capital stock in the amount of $14,490,000 par value for the acquisition of property, the construction, completion, extension or improvement of its plant or distributing service, the discharge or lawful refunding of its obligations, and to cause the aggregate capitalization to conform to the fair value of the property of said The Chesapeake and Potomac Telephone Company of Baltimore City as established by this Commission in Case No. 690, is hereby authorized and approved."

The $14,490,000 capital stock was not issued immediately. On February 7th, 1921, (Case No. 1886), the Company asked permission of the Commission to issue the stock, for purposes other than those named by the Commission in its previous Order. On February 18th, 1921, the Commission issued an Order reading in part as follows:

[fol. 1449] "That Order No. 4434 in Case No. 1564 is hereby amended so as to permit of the issue by The Chesapeake and Potomac Telephone Company of Baltimore City of its capital stock in the amount of $14,490,000 par value, the same or the proceeds of sale thereof at par to be used for the refunding and repayment of a demand note made to the Maryland Telephone Company of Baltimore City upon the taking over the property of the latter, in conformity to such order, and for the refunding and repayment,

in part of advances made to the Chesapeake and Potomac Telephone Company of Baltimore City on demand notes and open accounts."

The $14,490,000 capital stock was represented by 299,800 shares of stock with a par value of $50 each. During 1921, 274,225 shares of the stock was issued to the New York Telephone Company and the proceeds used to retire notes of the Company held by the New York Telephone Company. The Balance Sheet of the Company as of December 31st, 1921, showed that the outstanding capital stock of the Company totaled $13,721,250 (274,425 shares, $50 par) and that all the stock was held by the New York Telephone Company, with the exception of 7 shares held by the directors of the Company.

On April 4th, 1922 (Case No. 1990), the Company applied to the Commission for an Order authorizing it to issue $3,000,000 par value 7% cumulative Preferred Stock, the funds from the sale of the stock to be used for the acquisition of property, construction, completion, extension and improvement of its facilities and the discharge or lawful refunding of its obligations. The Commission, on April [fol. 1450] 13th, 1922, granted permission to the Company to issue the Preferred Stock. In the year 1922, $2,503,700 par value Preferred Stock was sold; in the year 1923, $493,400 par value Preferred Stock was sold, and the remaining $2,900 par value Preferred Stock was disposed of in the year 1924.

On June 2nd, 1922 (Case No. 2014), the Company, in a petition to the Commission, requested permission to issue $3,453,100 common capital stock, this $3,453,100 included $1,278,750 common capital stock authorized by Orders in Case No. 1564. The $1,278,750 had not been issued. The Commission, on June 14th, 1922, granted authority to the Company to issue the $3,453,100 common capital stock. In the year 1922, with the authority of the Commission (Case No. 2014), $3,200,000 of the common capital stock was issued to the American Telephone and Telegraph Company and the proceeds were used in part to pay demand notes of the Company in the amount of $2,225,000 held by the American Telephone and Telegraph Company. The balance of $253,100 of the authorized common stock was issued in the year 1923, and the proceeds used to liquidate a demand note

of the Company to the Maryland Telephone Company of Baltimore City.

The Company, on November 8th, 1926 (Case No. 2535), requested authority of the Commission to issue $9,825,700 par value common capital stock for acquisition of property, the construction, completion, extension and improvement of its facilities, and for the discharge or lawful refunding of its obligations. On November 19th, 1926, the authority to issue the stock was given by the Commission. In the [fol. 1451] latter part of the year 1926, $9,650,000 of the stock was issued to the American Telephone and Telegraph Company, with the permission of the Commission (Case No. 2536). Of the proceeds, $9,150,000 was used to liquidate demand notes of the Company held by the American Telephone and Telegraph Company.

On September 15th, 1930 (Case No. 3134), the Company asked authority of the Commission to issue $3,175,700 common capital stock. The $3,175,700 included $175,700 authorized previously by the Commission (Case No. 2535), but not issued. The Commission, on September 30th, 1930, granted the request of the Company to issue the $3,175,700 stock. With the permission of the Commission (Case No. 3135), the Company in the year 1930, issued the entire $3,175,700 common capital stock to the American Telephone and Telegraph Company, and applied the proceeds to liquidate demand notes of the Company held by the American Telephone and Telegraph Company.

On December 31, 1932, the outstanding capital stock of the Company consisted of $30,000,000 par value common stock, and $3,000,000 par value 7% cumulative preferred stock. All of the common stock was held by the American Telephone and Telegraph Company. The stock formerly held by the New York Telephone Company was acquired by the American Telephone and Telegraph Company in the year 1923. The 7% cumulative preferred stock was held by the public.

[fol. 1452]

III

Valuation and Rate History

Case 38. The Chesapeake and Potomac Telephone Company of Baltimore City was one of the first public utility

corporations to invoke the jurisdiction of the Commission. On August 18, 1910, soon after the creation and organization of the Commission, it filed tables of proposed telephone rates for Baltimore City. On October 24, 1910, at the first public hearing before the Commission, the Company submitted an itemized statement of values. On March 17, 1911, the Chief Engineer of the Commission, Mr. Charles E. Phelps, after completing a check of the "book" values as reported by the Company, stated that the values were so reasonable, in his judgment, that nothing could be gained in making a "physical" valuation. Mr. Dugald C. Jackson of Boston, a consulting engineer, after completing an investigation, confirmed the view of the Commission's Chief Engineer.

The Company's actual investment in Baltimore City as of September 30, 1910, according to their book values, was $5,667,642. The figures of the Chief Engineer were but about $2,000 under the figures of the Company. For the year ended June 30, 1910, the net operating revenue of the Company was $861,589, and the net income for the same period was $400,169.

[fol. 1453] An Order in Case 38 was passed on January 2, 1912, and in the Order the Commission established the rates for the different classes of telephone service in Baltimore City. Subsequent Orders made certain revisions in some of the rates and postponed the dates on which certain specific rates became effective.

Case 690. Soon after the determination of Case 38, there was formed an organization known as the Protective Telephone Association of Baltimore City, with a large membership, composed of patrons of the Company, and this body took steps to have presented to the Commission a petition of the grievances of telephone subscribers in Baltimore City. The Association's petition attacking the findings and Order in Case 38 was presented to the Commission on March 31, 1913, and The Chesapeake and Potomac Telephone Company of Baltimore City, The Chesapeake and Potomac Telephone Company (N. Y.) and the American Telephone and Telegraph Company were made respondents.

On December 1, 1913, the Commission ordered that an investigation be made of the property and the affairs of the respondent companies, and the Assistant General Coun-

sel, Mr. Osborne L. Yellott, was directed to plan and conduct the inquiry. The investigation of the Company's property, the Commission stated, was thorough, systematic, and exhaustive. "The work in this case is epochal in the development of utility regulation by State Commissions and is universally conceded to be a monumental undertaking, mas- [fol. 1454] terfully executed according to the most modern and approved methods of engineering and accounting rules for the determination of rate-making values."

The findings of the Commission were set out in an opinion written by Mr. Albert G. Towers, the Chairman, and was dated March 8, 1916. In Case 690, the Commission found that the fair value for rate-making purposes of the property of The Chesapeake and Potomac Telephone Company in Baltimore City and the State of Maryland, was $11,554,758 as of June 30, 1914.

The Commission arrived at the above value after considering all of the elements of value mentioned in Smyth vs. Ames, 169 U. S. 466.

Case 1709. The rates which were established in Case 690 were continued in substance until the period of Federal control and operation of the Company. The Postmaster-General increased the toll rates in January, 1919, and exchange rates in May, 1919.

The National Government returned the telephone system to the Company on July 31, 1919, on which date the Company filed with the Commission a petition wherein it requested that it be permitted to increase its rates for service, and until its application could be heard, it be permitted to continue to charge the same rates as were established by the Postmaster-General. Under an Order dated November 28, 1919, the Commission allowed the Company [fol. 1455] to keep in force the rates fixed under Government control. The hearings before the Commission were started on January 5, 1920, and, because of several necessary postponements, continued for a period of about six months.

Under an Order dated August 18, 1920, the Commission stated:

"The fair value for rate-making purposes of the property of The Chesapeake and Potomac Telephone Company of

Baltimore City in the State of Maryland is hereby declared to be $16,725,532 as of December 31, 1919."

The rates as established by the Commission were, with some minor exceptions, substantially the same rates as were asked by the Company in its petition of July 31, 1919.

Case 2274. The Company filed with the Commission on June 2, 1924, schedules for increased rates, which rates were intended to become effective on November 1, 1924. Following protest from various bodies regarding the proposed increase in rates, the Commission entered its Order providing for an investigation of the Company. The hearings before the Commission started on September 22, 1924, and continued for three months. Due to the fact that the case before the Commission was not finished by November 1, 1924, the Company, at the request of Governor Ritchie, postponed the effective date of the rate increases from November 1, 1924 to January 1, 1925.

[fol. 1456] The Commission, under Order dated December 29, 1924, found:

"That the rates proposed for telephone service in Maryland are unreasonable and unjust, that they would constitute an unfair burden upon the telephone users of this State, and they will not be allowed.

"That the existing rates and schedules, established by this Commission after exhaustive hearings in Cases No. 690 and No. 1709, and after briefer subsequent hearings in No. 1709, will yield a fair return on the fair value of the telephone property in Maryland used and useful in public service, provided adequate compensation is received for services rendered by The Chesapeake and Potomac Telephone Company of Baltimore City to the American Telephone and Telegraph Company.

"That this Commission sees no sound reason for disturbing at this time the rate base, established in Case No. 690 and continued until the present proceedings were instituted, with no dissent from the Company."

The Commission found that the value of the telephone property in Maryland as of December 31, 1923 was as follows:

Fair value of Chesapeake and Potomac Telephone Company of Baltimore City..... $24,350,944

Book Cost of American Telephone and Telegraph Company of Baltimore City	2,900,000
Value of Instruments in Maryland	550,187
Total value	$27,801,131

[fol. 1457]

Net Revenue (Combined Companies) 1923	$2,037,498
Return on Company Property	7.3%
Return on Chesapeake and Potomac Property	5.68%

On December 31, 1924, the Company filed a suit in the United States District Court, the bill of complaint stating that under the rates the Commission required it to maintain, it could not get a fair return upon the fair and reasonable value of its property exclusively devoted to furnishing intrastate telephone service in Maryland. The Court found a value of $29,507,949 as of December 31, 1923 through the application of the United States Department of Labor, Bureau of Labor Statistics all-commodities index number. The Court also held that the company was entitled to a 6% return on above mentioned fair value. (See Chesapeake and Potomac Telephone Company of Baltimore City vs. Ezra B. Whitman et al. (3 F. (2nd) 938). The case was heard before Circuit Judge Rose and District Judge Groner and Soper.)

The reopening of the case was necessary by the action of the United States District Court which, on February 27, 1925, handed down an opinion, declaring the rates for telephone service in Maryland, as established by the Commission under its Order of December 29, 1924, to be confiscatory.

[fol. 1458] The Commission then found the value of the Company's property as of December 31, 1924, to be as follows:

Value as of December 31, 1923 as established by Court	$29,507,950
Additions to Fixed Capital (1924)	3,813,024
Addition to Working Capital	75,000
Decrease in Depreciation Reserve	3,556
Value as of December 31, 1924	$33,399,530

The amount of the Net Revenue required was determined to be $2,675,000. The Commission, by subsequent Orders, determined the rates in order to produce the required net income.

Case No. 3424. On January 19, 1933, after having had unsuccessful conferences with Company officials relative to a reduction in telephone rates, the Commission entered Order No. 22193 instituting an investigation of the Company. The investigations were made, hearings held and, on November 8, 1933, the Commission handed down an Opinion and an Order requiring a reduction in telephone rates. The Company did not accept the findings of the Commission and, on December 13, 1933, instituted proceedings in the United States District Court.

The following is a short compilation of residence rate schedules applicable to Baltimore City filed by the Company with the Commission:

[fol. 1459]

	May 1, 1912	August 1, 1919	Sept. 1, 1920	April 1, 1925
Flat Rate	$4.00 per mo.	$5.00 per mo.	$5.50 per mo.	$6.00 per mo.
Two Party Line	$2.00 " " (30 messages, 5¢ for each additional message)	$2.25 " " (35 messages, 5¢ for each additional message)	$2.50 " " (35 messages, 5¢ for each additional message)	$2.75 " " (35 messages, 5¢ for each additional message)
Individual Line		$3.50 per mo. (50 messages*)	$3.50 per mo. (50 messages*)	$4.00 per mo. (50 messages†)

*First 50 messages 4½¢ each
Next 50 " 4¢ "
" 50 " 3½¢ "
" 50 " 3¢ "
" 50 " 2½¢ "
Excess over above 2¢ "

*First 100 messages 5¢ each
Next 100 " 4¢ "
Excess over above 3¢ "

†First 100 messages 5¢ each
Next 100 " 4¢ "
Excess over above 3½¢ "

[fol. 1460] DEFENDANTS' EXHIBIT D-3

Comparison of Values in Commission Cases

[fol. 1461] (2)

The Chesapeake and Potomac Telephone Company of Baltimore City

Comparison of Values in Commission Cases

Company	Per Cent by Which Company Valuation Exceeded Commission Engineer's Valuation	Per Cent Difference between Commission's Valuation and Chief Engineer's Valuation	Per Cent Difference between Commission's Valuation and Company's Valuation
United Railways & Electric Company—			
Without Easements	46.24%	−13.71%	+26.18%
With Easements	75.69%	−19.35%	+41.70%
Consolidated Gas Electric Light and Power Company of Baltimore	66.24%	−19.72%	+33.45%
Cumberland & Allegheny Gas Company	42.08%	+ 4.72%	+48.79%
Eastern Shore Public Service Company	.....	.....	+59.13%
Washington Suburban Gas Company	30.34%	− 4.12%	+24.96%
The Potomac Edison Company	66.75%	− 4.40%	+59.42%
Maryland Light and Power Company	37.61%	− .82%	+36.48%

[fol. 1462] (4)

The Chesapeake and Potomac Telephone Company of Baltimore City Comparison of Values in Cases Reported in 1931 Public Utility Reports

Case	Excess of Company valuations over Commission valuations
Nekoosa-Edwards Light and Power Company (A 69)	2.123%
Northern States Power Company (A 90)	45.677%
Cheltenham and Abington Sewerage Company (A 114)	23.067%
Los Angeles Gas & Electric Company (A 132)	45.210%
Southern Indiana Gas & Electric Company (A 401)	13.524%
Johnson County Telephone Company (A 446)	42.609%
Long Branch Sewer Company (A 467)	14.299%
Bowdoin Utilities Company (B 20)	20.552%
Ohio Bell Telephone Company (B 46)	36.897%
Beckley Water Company (B 275)	71.191%

Case	Excess of Company valuations over Commission valuations
State ex rel. to use of City of St. Louis (B 448)	18.110%
United Corporations (B 497)	38.280%
Elko Lamoille Power Company (C 14)	29.535%
Black River Telephone Company (C 26)	42.462%
Utica Gas and Electric Company (D 289)	43.418%
Leadville Water Company (D 366)	42.422%
Toledo Edison Company (D 491)	4.035%
City of Charleston vs. P. S. C. of West Virginia (E 74)	10.347%
Clinton Electric Light & Power Company (E 196)	27.064%
Michigan Home Telephone Company (E 437)	5.842%

[fol. 1463] (5)

The Chesapeake and Potomac Telephone Company of Baltimore City

Comparison of Values in Cases Reported in 1932 Public Utility Reports

Case	Excess of Company valuations over Commission valuations
City of Vincennes v. Vincennes Water Supply Company (1932 A PUR. 16)	89.73%
Department of Public Works of Washington v. Grays Harbor Railway and Light Company	7.66%
City of Moncton v. Moncton Tramways, Electric and Gas Co., Ltd. (1932 B PUR. 368)	28.85%
P. S. C. of Pa. v. Clark's Ferry Bridge Co. (1932 B PUR. 295)	34.05%
City of Loogootee v. Loogootee Water Co. (Indiana) (1932 C PUR. 494)	135.36%
Los Angeles Gas and Electric Corporation v. Railroad Commission (1932 C PUR. 397)	46.21%
Re Alexandria Water Company (Va.) (1932 C PUR. 342)	70.38%
Re City of Visalia v. California Water Service Co. (1932 C PUR. 518)	36.61%
Re Ohio Central Telephone Corporation (1932 D PUR. 439.)	67.88%

[Vol. 1464] DEFENDANTS' EXHIBIT D-4

Balance Sheet, Original Cost of Property and Related Statements

[Vol. 1465] (2)

The Chesapeake and Potomac Telephone Company of Baltimore City

Balance Sheet—December 31, 1932

Assets

Investments—		
Fixed Capital	$49,990,582.89	
Construction Work in Progress	1,363.68	
Miscellaneous Investments	4,507.28	
Total Investments		$49,996,453.85
Working Assets and Accrued Income—		
Cash and Deposits	367,555.57	
Employees' Working Funds	16,823.29	
Marketable Securities	150,300.00	
Due from Subscribers and Agents	1,127,789.51	
Accounts Receivable from System Corporations	25,532.43	
Miscellaneous Accounts Receivable	47,962.49	
Material and Supplies	154,333.83	
Unmatured Interest, Dividends and Rents Receivable	1,854.52	
Total Working Assets and Accrued Income		1,891,642.03
Deferred Debit Items—		
Prepayments	122,203.84	
Other Suspense	91,427.02	
Total Deferred Debit Items		213,630.86
Total Assets		$52,101,726.74

Liabilities and Capital

Stocks—		
Capital Stock—Common	30,000,000.00	
Capital Stock—Preferred	3,600,009.00	
Premiums on Capital Stock	15,419.00	
Total Stocks		$33,015,419.00
Long Term Debt—		
Advances from System Corporations for Construction, etc.		3,675,000.00

[Vol. 1466] (3)

Working Liabilities and Accrued Liabilities—		
Bills Payable	$1,164,817.01	
Audited Vouchers and Wages Unpaid	174,040.30	
Subscribers' Deposits	69,474.93	
Accounts Payable to System Corporations	313,178.58	
Miscellaneous Accounts Payable	36,356.66	
Matured Interest, Dividends and Rents Unpaid	371.00	
Services Billed in Advance	247,134.55	
Other Current Liabilities	37,837.09	
Taxes Accrued	961,445.70	
Other Accrued Liabilities not Due	54,821.63	
Total Working Liabilities and Accrued Liabilities		$3,060,529.45

Defendants' Exhibit D-4—Continued

Deferred Credit Items—		
Reserve for Accrued Depreciation	9,922,297.88	
Reserve for Amortization of Intangible Capital	227,682.87	
Liability on Account of Provident Funds	3,000.00	
Other Deferred Credit Items	538.73	
Total Deferred Credit Items		$10,223,569.13
Corporate Surplus Unappropriated		2,517,209.11
Total Liabilities and Capital		$52,101,726.74

[fol. 1467]

(5)

The Chesapeake and Potomac Telephone Company of Baltimore City

Analysis of Surplus Account

1924	Debit	Credit	
Surplus—December 31, 1923	$	$	$1,044,591.43
Miscellaneous Additions		180.27	
Debit Balance from Income	284,699.81		
Amortization of Other Intangible Capital	2,421.66		
Debit Balance			(286,941.20)
1925			
Surplus—Decober 31, 1924			757,650.23
Credit Balance from Income		64,576.79	
Miscellaneous Additions		391.79	
Amortization of Other Intangible Capital	2,421.66		
Other Deductions	737.23		
Credit Balance			61,809.69
1926			
Surplus—December 31, 1925			819,459.92
Credit Balance from Income		348,923.78	
Miscellaneous Additions		116.41	
Amortization of Other Intangible Capital	2,421.66		
Loss in connection with cancellation construction work estimates	12,597.39		
Other Deductions	21.99		
Credit Balance			333,998.95
1927			
Surplus—December 31, 1926			1,153,458.87
Credit Balance from Income		2,116.98	
Excess of selling price and the amount in the depreciation reserve account and amortization account in respect of property sold at more than original cost		10,006.19	
Transfer from miscellaneous deferred credits the excess of selling price and the amount in the depreciation reserve in respect of property sold at more than original cost, carried as a deferred credit pending completion of sale		108,002.73	

Defendants' Exhibit D-4—Continued

[fol. 1468]

(6)

Loss in connection with cancellation of construction work estimates	2,547.00		
Other Credits		93.33	
Credit Balance			$112,674.23
1928			
Surplus—December 31, 1927			1,266,133.10
Credit Balance from Income		266,285.30	
Excess of selling price and the amount in the depreciation reserve account and amortization account in respect of property sold at more than original cost		1,286.26	
Miscellaneous Credits		165.35	
Appropriation to cover the estimated liability for pending employees' accident and accident death cases	10,100.00		
Other Deductions	19.75		
Credit Balance			257,617.16
1929			
Surplus—December 31, 1928			1,523,750.26
Credit Balance from Income		325,358.42	
Adjustment of liability for pending accident and accident death cases		8,300.00	
Other Credits		429.32	
Excess of selling price over book value in connection with sale of land		489.93	
Other Deductions	530.10		
Credit Balance			334,048.57
1930			
Surplus—December 31, 1929			1,857,798.83
Credit Balance from Income		274,778.69	
Excess of selling price and adjustment of depreciation accrual in connection with sale of mines plant		839.37	
Other Credits		576.55	
Expenditures covering proposed additions to plant, estimates which were cancelled	672.09		
Note and stock of City Club, written off on account of insolvency	869.68		
Adjustment of liability for pending accident and accident death cases	800.00		
Other Deductions	112.00		
Credit Balance			374,010.79

Defendants' Exhibit D-4—Continued

[fol. 1469] (7)

1931			
Surplus—December 31, 1930			$2,131,809.62
Credit Balance from Income		435,141.26	
Adjustment of liability on account of pending accident and accident death cases		1,800.00	
Excess of selling price over original cost in place and estimated depreciation accrued on plant sold		2,499.53	
Other Credits		845.35	
Other Deductions	330.50		
Credit Balance			439,955.64
1932			
Surplus—December 31, 1931			2,571,465.26
Dividend appropriation from Surplus	45,074.55		
Adjustment of liability on account of pending accident and accident death cases	2,600.00		
Other Credits		472.08	
Other Deductions	39.68		
Reclassification of contributions charged directly to expense since September 1932 and the portion of contributions charged mutually to prepaid expense which is applicable to the last four months of 1932, in accordance with opinion of I.C.C.	7,114.00		
Debit Balance			(54,256.15)
Surplus—December 31, 1932			$2,517,209.11

[fol. 1470] (9)

The Chesapeake and Potomac Telephone Company of Baltimore City

Analysis of Notes Payable to Pension Fund Trustee

Amount set up December, 1927		$132,610.82
1928		
Transferred from Employees' Benefit Fund Reserve		306,295.65
Gross Accruals—1928	$70,706.00	
Interest on Notes	12,246.35	
Total	82,951.36	
Less Pension Payments	7,967.36	
	74,983.99	
Less Transfer to Other Companies	11,650.00	
Net Accretion—1928		63,333.99
Balance—December 31, 1928		$502,240.16

DEFENDANTS' EXHIBIT D-4—Continued

1929		
Gross Accruals	$125,368.00	
Transferred from C. & P. Telephone Company	40,111.00	
Interest on Notes	30,554.78	
Total	$196,033.78	
Less Pension Payments	13,498.49	
Net Accretion—1929		182,535.29
Balance—December 31, 1929		$684,775.45
1930		
Gross Accruals—1930	$145,643.00	
Interest on Notes	39,965.24	
Total	$185,608.24	
Less Pension Payments	21,563.79	
Net Accretion—1930		164,044.45
Balance—December 31, 1930		$848,819.90
1931		
Gross Accruals—1931	$146,927.00	
Interest on Notes	48,967.73	
Total	$195,894.73	
Less Pension Payments	31,402.63	
Net Accretion—1931		164,492.10
Balance—December 31, 1931		$1,013,312.00
1932		
Gross Accruals—1932	$142,795.00	
Interest on Notes	46,051.83	
Total	$188,846.83	
Less Pension Payments	37,341.82	
Net Accretion—1932		151,505.01
Balance—December 31, 1932		$1,164,817.01

[fol. 1471] (11)

The Chesapeake and Potomac Telephone Company of Baltimore City

Fixed Capital Accounts

Organization	$6,960.55
Other Intangible Capital	26,661.76
Intangible Capital	33,622.31

Plaintiff's Exhibit A-31—Continued

Right of Way	934,220.20
Land	661,422.62
Buildings	2,881,644.54
Land and Buildings	3,543,067.16
Central Office Telephone Equipment	11,542,036.73
Other Equipment of Central Offices	363,401.20
Central Office Equipment	11,905,437.93
Station Apparatus	3,832,859.28
Station Installations	1,049,960.16
Interior Block Wires	82,986.25
Private Branch Exchanges	1,585,306.68
Booths and Special Fittings	602,747.98
Station Equipment	7,153,860.35
Exchange Pole Lines	3,785,816.31
Exchange Aerial Cable	4,577,472.30
Exchange Aerial Wire	2,368,910.34
Exchange Underground Conduits	3,852,902.38
Exchange Underground Cable	6,209,515.07
Exchange Submarine Cable	19,229.37
Toll Pole Lines	1,601,269.67
Toll Aerial Cable	924,484.34
Toll Aerial Wire	875,963.39
Toll Underground Conduit	149,862.46
Toll Underground Cable	868,090.65
Toll Submarine Cable	58,149.06
Office Furniture and Fixtures	332,974.90
General Shop Equipment	1,765.00
General Store Equipment	29,856.32
General Stable and Garage Equipment	299,666.36
General Tools and Implements	126,810.33
General Equipment	791,072.91
Interest During Construction	337,636.69
Total	$49,990,582.89

Defendants' Exhibit D-4—Continued

[fol. 1472] (13)

The Chesapeake and Potomac Telephone Company of Baltimore City

Cost of Fixed Capital Less Depreciation Reserve

Cost December 31, 1923			$27,687,889.12	
	Gross	Retirements		
1924	$4,696,830.07	$1,499,182.33	3,199,647.74	
1925	5,639,717.87	2,146,288.94	3,493,428.93	
1926	5,991,086.96	1,892,856.57	4,098,230.39	
1927	4,938,795.51	2,101,744.85	2,837,050.66	
1928	4,013,393.14	2,159,347.26	1,854,045.88	
1929	4,435,487.80	2,230,356.11	2,205,131.69	
1930	5,926,838.43	3,192,870.80	2,733,967.63	
1931	4,152,078.52	2,692,595.50	1,459,483.02	
1932	3,326,386.52	2,904,678.69	421,707.83	
	$43,122,614.82	$20,819,921.05		
Total—December 31, 1932				$49,990,582.89
Depreciation Reserve per Books—December 31, 1923			$6,439,795.99	
	Gross	Charges		
Additions to Reserve—				
1924	1,517,529.99	1,521,085.99	(3,556.00)	
1925	1,708,753.91	1,508,324.54	200,429.37	
1926	1,906,823.25	1,359,488.74	547,334.51	
1927	2,082,194.12	1,277,482.76	804,711.36	
1928	2,206,966.24	1,548,196.62	658,769.62	
1929	2,345,323.28	1,521,507.47	823,815.81	
1930	2,455,236.19	2,268,389.64	186,846.55	
1931	2,530,256.36	2,301,155.79	229,100.57	
1932	2,637,025.36	2,294,292.69	342,732.67	
Total of Reserve—December 31, 1932				$10,229,980.45
Cost of Fixed Capital less Depreciation Reserve—December 31, 1932				$39,760,602.44

(Here follow tables, vide folios 1473-1475.)

[fol. 1473]

(15)

The Chesapeake and Potomac Telephone Company of Baltimore City

Charges to Depreciation Reserve

(Retirements and Extraordinary Repairs)

		1924	1925	1926	1927	1928	1929	1930	1931	1932	Total
102.01	Pole Lines	$328,404.10	$344,056.21	$231,653.92	$212,006.51	$345,534.67	$433,760.65	$419,699.80	$638,595.98	$682,945.40	$3,637,456.24
.02	Aerial Cable	105,051.19	157,914.61	140,554.10	171,188.40	184,241.27	166,630.88	199,030.75	210,677.96	172,343.15	1,807,632.31
.03	Aerial Wire	555,824.84	339,645.29	240,643.39	320,474.76	273,367.20	153,110.84	112,069.69	505,709.35	595,277.52	3,096,122.88
.04	Underground Conduit	8,232.56	25,201.46	22,973.50	19,527.81	9,424.22	11,035.01	23,748.35	23,645.03	13,960.65	157,948.39
.05	Underground Cable	32,151.05	125,306.63	168,961.07	105,857.36	148,220.98	156,397.37	180,804.46	148,179.30	126,494.78	1,242,373.00
.06	Submarine Cable	2,018.00	423.11	3,754.67	1,204.02	12,929.30	1,568.20	2,743.95	7,388.52	30,995.90	63,025.67
.07	Central Office Equipment	143,551.25	184,290.96	269,722.59	155,282.23	150,431.18	53,179.30	740,886.19	227,091.30	124,141.60	2,048,576.60
.08	Station Equipment	179,267.01	156,828.67	175,485.06	159,613.90	236,496.53	275,862.65	406,460.64	394,521.93	365,012.88	2,349,549.27
.10	Buildings	15,183.86	65,528.75	6,017.00	9,234.53	27,073.82	18,397.50	4,119.34	6,412.16	1,203.99	153,170.95
.708	Interest During Construction	4,060.31	5,232.71	9,268.11	5,043.69	4,733.74	2,888.43	13,345.68	5,217.33	2,778.67	52,368.67
.20	Office Furniture and Fixtures	4,219.20	3,964.63	6,060.26	11,421.70	7,138.14	13,250.95	10,643.60	15,142.68	20,870.90	92,712.06
.30	General Shop Equipment	.....	.....	.....	.....	.....	18.58	751.32	109.17	.....	879.07
.40	General Store Equipment	874.47	294.06	218.17	203.79	664.75	3,634.60	6,588.28	2,197.71	1,961.85	16,637.68
.50	General Stable and Garage Equipment	40,750.18	59,676.80	44,282.51	59,618.28	79,031.45	174,137.32	90,820.17	72,577.81	84,145.89	705,040.41
.60	General Tools and Implements	46,769.77	22,312.60	25,540.60	32,943.42	60,577.90	50,540.68	45,321.11	31,291.63	49,820.14	365,117.85
.09	Radio and Public Address Equipment	.....	46.48	1,605.58	.....	.....	.....	.....	.....	.....	1,652.06
				775.56*	2,658.26*						3,433.82*
	Total Charges to Depreciation Reserve	$1,516,357.79	$1,491,522.97	$1,347,616.09	$1,266,278.66	$1,539,865.15	$1,514,412.96	$2,257,039.23	$2,288,957.86	$2,271,954.32	$15,493,905.13
103.01	Right of Way	4,728.20	16,801.57	11,972.65	11,204.10	8,331.47	7,094.51	11,350.31	12,197.93	22,238.37	106,019.11
											$15,599,924.24

* Applicable to operations in Virginia and West Virginia.

[fol. 1474]

(17)

The Chesapeake and Potomac Telephone Company of Baltimore City

Statement of Capital Invested in Plant by Years per Accounts

	Account	Balance Dec. 31, 1932	1932	1931	1930	1929	1928	1927	1926	1925	1924
201	Organization	$6,960.55	$.....	$.....	$1,891.95	$.....	$.....	$6.00	$5,062.60	$.....	$.....
204	Other Intangible Capital	26,661.76									
207	Right of Way	934,220.20	26,666.62	32,251.34	27,968.93	27,462.73	33,563.18	42,739.86	43,977.78	38,852.18	37,628.42
211	Land	661,422.62	889.62	740.73	10,833.94	871.68	14,793.55	26,830.00	29,751.88	(1,588.29)	124,596.17
212	Building	2,881,644.54	299.59	12,236.03	256,433.25	200,199.03	54,899.60	135,653.09	257,700.45	490,831.24	61,337.14
221	Central Office Tel. Equipment	11,542,036.73	340,547.16	321,302.18	1,486,825.65	184,877.57	486,846.61	770,309.81	1,940,359.08	1,343,677.40	806,641.81
222	Other Equipment of Central Office	363,401.20	5,426.50	12,088.45	37,158.31	31,000.03	38,025.67	28,978.70	146,699.89	64,023.65	
231	Station Apparatus	3,832,859.28	840,562.54	971,443.23	1,004,348.90	749,735.66	266,670.95				
232	Station Installation	1,049,960.16	174,560.74	195,635.38	181,401.95	171,025.25	148,487.52	123,673.26	55,176.06		
233	Interior Block Wires	82,986.25	11,153.39	18,868.33	10,840.52	13,223.94	12,546.15	12,695.57	3,658.35		
234	Private Branch Exchanges	1,585,306.68	197,455.51	240,020.49	303,179.20	299,203.04	193,056.17	210,308.06	142,084.21		
235	Booths and Special Fittings	602,747.98	93,963.94	133,357.58	135,441.32	90,037.56	57,931.93	55,897.91	36,117.74		
241	Exchange Pole Lines	3,785,816.31	289,670.38	412,954.37	389,509.31	438,271.07	355,769.45	382,148.86	337,256.08	500,842.85	409,389.09
242	Exchange Aerial Cable	4,577,472.30	247,189.57	481,962.60	375,944.34	441,744.26	420,795.13	668,038.09	434,867.26	646,487.05	495,080.48
243	Exchange Aerial Wire	2,368,910.34	233,344.21	294,928.79	264,840.12	279,281.89	251,516.97	263,391.55	310,591.18	341,819.50	129,196.19
244	Exchange Underground Conduits	3,852,902.38	93,916.06	139,348.60	350,125.86	249,990.86	156,631.87	314,813.82	250,656.10	283,999.28	188,875.01
245	Exchange Underground Cable	6,209,515.07	240,422.95	400,877.67	523,248.13	460,158.15	416,160.28	599,397.52	854,544.08	505,906.67	491,854.71
246	Exchange Submarine Cable	19,229.37	(6,231.70)	5,465.76	5,211.90	8,714.94	1,956.17	1,181.77	2,930.53		
251	Toll Pole Lines	1,601,269.67	124,018.12	179,267.13	131,798.25	176,583.38	158,732.26	91,918.10	73,873.80	89,756.55	158,779.06
252	Toll Aerial Cable	924,484.34	227,619.02	60,843.41	97,599.40	11,591.66	2,778.24	(13,097.34)	6,913.18	108,096.58	191,280.66
253	Toll Aerial Wire	875,963.39	26,703.74	75,591.53	36,467.29	91,720.29	85,299.38	77,087.66	36,333.13	6,166.86	110,138.61
254	Toll Underground Conduit	149,862.46	.....	15,850.16	15,012.91	16,697.38	10,387.01	1,943.39	5,528.78	129.29	852.40
255	Toll Underground Cable	868,090.65	81,311.52	32,903.41	84,401.78	7,365.62	187,293.70	(5,383.89)	18,964.98	14,855.94	5,354.40
256	Toll Submarine Cable	58,149.06	10,351.47	2,270.44	1,096.52	4,739.72	2,750.11	1,460.65	394.71	502.59	2,572.15
261	Office Furniture and Fixtures	332,974.90	15,744.24	12,464.80	38,972.21	166,607.68	32,699.64	17,467.68	20,617.71	12,892.42	15,586.52
262	General Shop Equipment	1,765.00	64.17	.....	(26.74)	33.53	(17.93)	.....	517.19	630.16	564.62
263	General Store Equipment	29,856.32	634.72	(6,298.22)	7,268.26	4,453.43	673.18	2,941.17	5,353.71	9,103.04	5,727.03
264	General Stable and Garage Equipment	299,666.36	54,146.03	70,278.72	74,033.39	101,208.22	.....	.....	.....	.....	.....
265	General Tools and Implements	126,810.33	(6,337.10)	28,941.41	34,100.62	69,405.31	700.09	.....	.....	.....	.....
268	Interest during Construction	337,636.69	2,193.51	6,484.20	40,912.96	8,508.93	6,801.98	17,804.92	53,020.44	52,303.69	29,650.22
	Totals	$49,990,582.89	$3,326,38.52	$4,152,078.52	$5,926,838.43	$4,304,712.81	$3,397,743.86	$3,828,206.21	$5,073,300.90	$4,509,089.69	$3,234,946.62

[Vol. 1473]

838C

(18)

Sheet 2

Statement of Capital Invested in Plant by Years per Accounts—Continued

	Account	1923	1922	1921	1920	1919	1918	Prior to 1918
201	Organization							
204	Other Intangible Capital		17,791.50			568.12		8,302.14
207	Right of Way	29,627.34	44,342.24	41,985.04	51,627.16	47,916.91	43,481.17	364,328.30
211	Land	220,241.50	1,013.24	70.86	16.00	51,500.00)		180,862.74
2—	Building	144,400.11	21,226.69	184,116.22	7,738.40	120,116.14)	14,334.90	920,123.66
221	Central Office Tel. Equipment	1,799,453.71	594,506.63	581,410.40	330,680.63	494,298.09		
222	Other Equipment of Central Office							
231	Station Apparatus							
232	Station Installation							
233	Interior Block Wire							
234	Private Branch Exchanges							
235	Booths and Special Fittings							
241	Exchange Pole Lines	270,004.81						
242	Exchange Aerial Cable	281,351.90	84,061.64					
243	Exchange Aerial Wire							
244	Exchange Underground Conduits	99,160.50	97,526.75	108,200.51	77,156.65	87,932.80	49,316.97	1,310,250.74
245	Exchange Underground Cable	408,490.58	324,537.82	217,542.63	193,885.01	143,491.03	111,703.77	317,294.07
246	Exchange Submarine Cable							
251	Toll Pole Lines	87,274.23	81,642.67	115,635.57	85,768.45	46,222.09		
252	Toll Aerial Cable	45,637.90	7,413.63	14,535.71	5,928.68	157,373.52		
253	Toll Aerial Wire	61,475.64	9,917.82	15,502.64	6,063.00	58,725.40	53,452.96	125,368.14
254	Toll Underground Conduit	624.76		1,039.43	1,850.33	11,681.07	140.91	68,174.64
255	Toll Underground Cable	(44,799.21)	11,761.79	1,696.29	225,441.61	122,460.33	51,736.63	72,675.15
256	Toll Submarine Cable	494.94	1,278.19	678.00	2,880.00	20.88	171.02	26,427.58
261	Office Furniture and Fixtures							
262	General Shop Equipment							
263	General Store Equipment							
264	General Stable and Garage Equipment							
265	General Tools and Implements							
269	Interest during Construction	62,753.56	57,202.28					
	Totals	$3,466,192.36	$1,354,220.89	$1,277,413.39	$989,035.92	$1,342,256.93	$324,887.68	$3,393,787.16

Defendants' Exhibit D-4—Continued

[fol. 1476] (39)

The Chesapeake and Potomac Telephone Company of Baltimore City

Summary of Capital Invested in Plant by Years per Accounts

Years	Accounts	Percentages of Total	Cumulative Percentages
1932	$3,226,285.23	6.554%	6.554%
1931	4,183,073.83	8.5057	14.9597
1930	5,626,886.43	11.4569	26.4166
1929	4,304,713.81	8.6110	35.4266
1927	3,307,748.36	6.7958	42.2224
1926	3,526,206.21	7.6879	49.9613
1925	5,073,200.90	10.1485	60.0208
1924	4,509,099.80	9.0199	69.0407
1923	3,224,965.68	6.6511	75.7008
1922	3,406,193.26	6.9337	82.6345
1921	1,354,220.79	2.7090	85.3435
1920	1,277,413.39	2.5553	87.8988
1919	969,085.93	1.9784	89.8772
1918	1,342,256.93	2.6850	92.5622
Prior to 1918	324,387.68	0.6489	93.2111
	3,363,787.16	6.7889	100.

[fol. 1477] Defendant's Exhibit D-5

Index Number Values and Related Statements

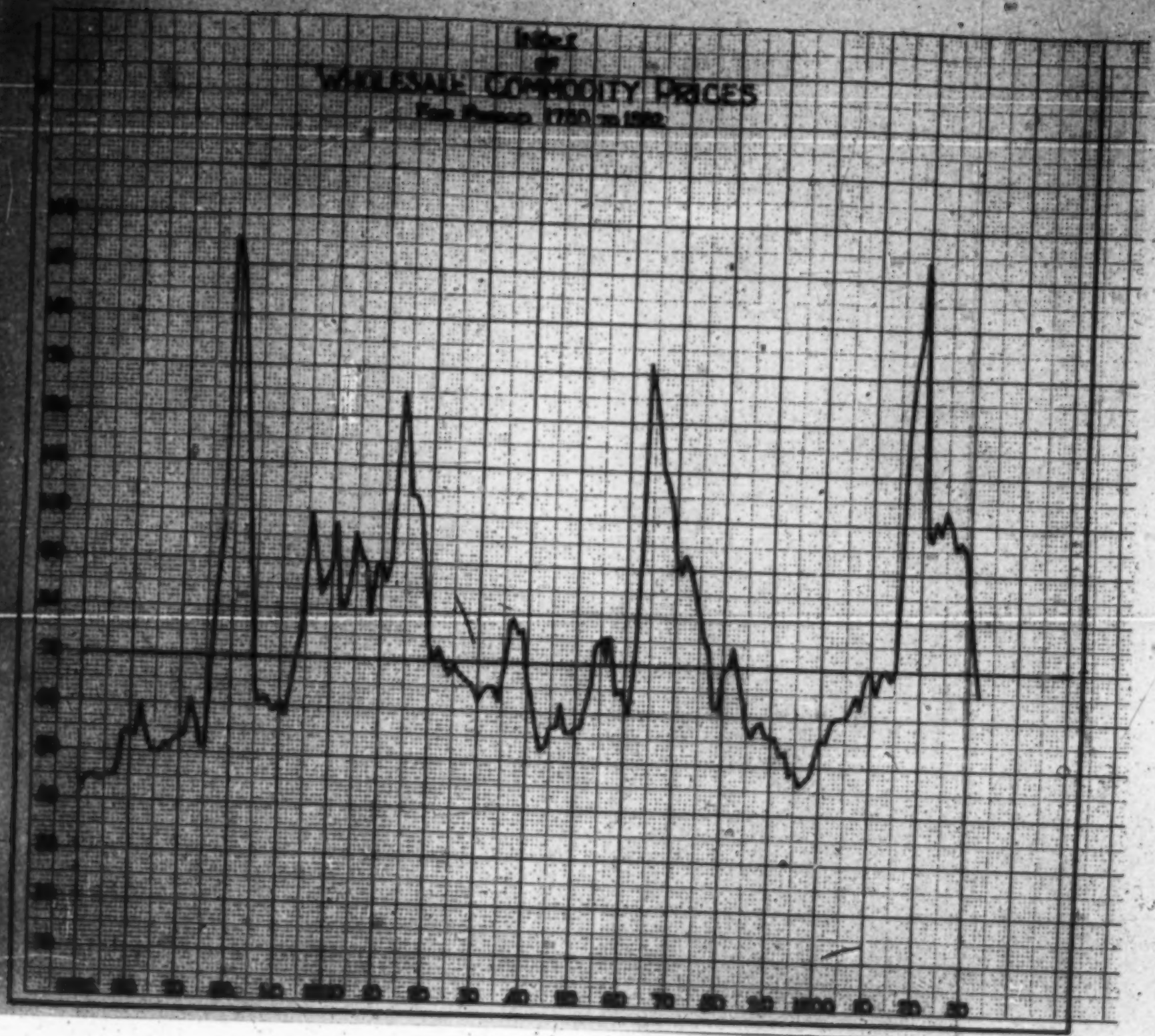
[fol. 1478] Index of Schedules in This Exhibit

Description of schedules	Pages
Buildings, decline in value of	12
Buildings, Liberty-Forest, decline in value of	13
C. & P. Index Number Compared with Building Materials—1923 to 1932	34
C. & P. Index Number—Value in 1923 Compared with Building Materials Index	33
C. & P. Index Number—Value in 1923 Compared with I. C. C. Index Number	65
England, Prices of	6
Index Numbers and Index Number Valuations:	
Accounts, by	69
American Appraisal Company	38 & 39
Annalist	29
Bradstreet's	25
Consolidated Engineering Company	41 & 42
Dun's	23
Engineering News Record	55, 56 & 57
Federal Reserve Bank	27

DEFENDANT'S EXHIBIT D-5—Continued

Description of schedules	Pages
Fertilizer Association, National	29
Fisher's	21
Interstate Commerce Commission	63, 64 & 65
McGill	29
Public Service Commission	75
Purchasing Agents, All-Commodities	19
Purchasing Agents, Building Materials	36
Richey, Dr. Albert S.	59, 60 & 61
Summary of Valuations, 1933	71
Summary of Valuations, Intrastate	73
Turner Construction Company	44 & 45
U. S. Department of Labor, All-Commodities, Total Assets	8
U. S. Department of Labor, All-Commodities, Fixed Capital	10 & 11
U. S. Department of Labor, Building Materials	31, 32, 33, 34
U. S. Department of Labor, Miscellaneous	4
Wage Rates	49
Wage Rates and U. S. Building Materials	53
Western Electric	67
Highway Construction Costs	15
Intrastate Property, Value of	73
Materials of Telephone Property, Index	14
Materials of Telephone, Map	17
Materials and Labor, Proportions	51
Prices, Chart of, from 1750 to 1932	2
Wage Rates, Baltimore Compared with Engineering News Record	48
Wage Rates, Baltimore, Index Number	47

(Here follows photolithograph of side folio 1479, page 2 of Defendant's Exhibit D-5)


Index
of
WHOLESALE COMMODITY PRICES
From Period 1720 to 1932

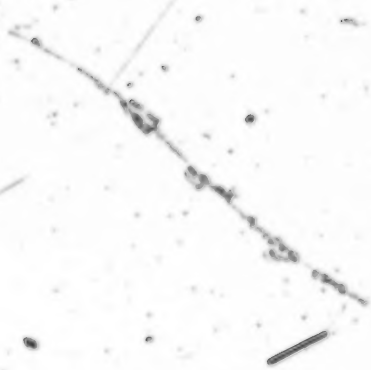
DEFENDANT'S EXHIBIT D-5—Continued

[fol. 1480] (4)

The Chesapeake and Potomac Telephone Company of Baltimore City

Index Numbers of Bureau of Labor Statistics of United States Department of Labor—December, 1933

Classification	Index Number
Farm Products	55.5
Foods	62.5
Hides and Leather Products	89.2
Textile Products	76.4
Fuel and Lighting	73.4
Metals and Metal Products	83.5
Building Materials	85.6
Chemicals and Drugs	73.7
Housefurnishing Goods	81.
Miscellaneous	65.7
All Commodities	70.8
Raw Materials	61.9
Semi-manufactured Articles	72.3
Finished Goods	74.8
Non-Agricultural Commodities	74.0
All Commodities other than Farm Products and Foods	77.5



(Here follows photolithograph of side folio 1481, page 6 of Defendant's Exhibit D-5)

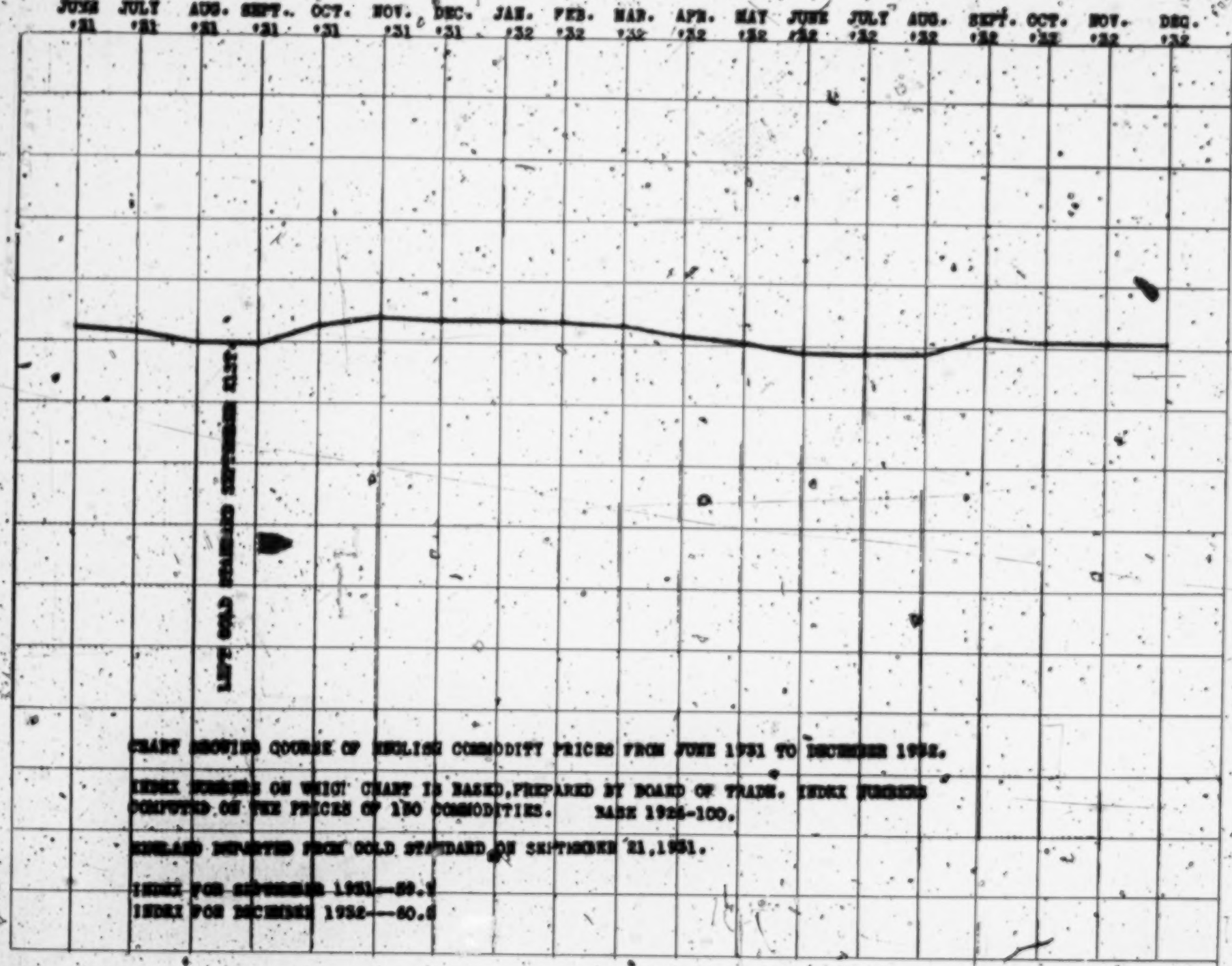


CHART SHOWING COURSE OF ENGLISH COMMODITY PRICES FROM JUNE 1931 TO DECEMBER 1932.

INDEX NUMBERS ON WHICH CHART IS BASED, PREPARED BY BOARD OF TRADE. INDEX NUMBERS COMPUTED ON THE PRICES OF 150 COMMODITIES. BASE 1926-100.

ENGLAND DEPARTED FROM GOLD STANDARD ON SEPTEMBER 21, 1931.

INDEX FOR SEPTEMBER 1931---59.1
INDEX FOR DECEMBER 1932---60.8

1461

6

Defendant's Exhibit D-5—Continued

[fol. 1482] (8)

The Chesapeake and Potomac Telephone Company of Baltimore City

Application of Index Numbers to Assets—Method Employed by Statutory Court in the Chesapeake and Potomac Telephone Company of Baltimore City v. Ezra B. Whitman et al., 3 F. (2nd) 938

	Amount	Translator U. S. Dept. of Labor—All Commodities	U. S. Dept. of Labor—All Commodities Index Number Applied	
Value of Assets, Dec. 31, 1923 (as found by Court)	$36,122,912.00	63.81	$23,050,030.15	
1924—Asset Increase	4,010,422.37	63.81	2,559,050.51	
1925 " "	3,665,615.31	60.48	2,216,964.14	
1926 " "	3,309,966.41	62.6	2,072,038.97	
1927 " "	2,971,592.96	65.62	1,949,959.30	
1928 " "	1,641,562.05	64.74	1,062,747.27	
1929 " "	3,127,243.25	65.69	2,054,286.09	
1930 " "	2,542,296.45	72.45	1,841,893.78	
1931 " "	1,908,969.36	85.75	1,636,941.27	
1932 " "	(153,955.00)	100.00	(153,955.00)	
Total Assets				$38,289,956.48
Total Reserve—Dec. 31, 1923 (as found by Court)	$6,614,963.00	63.81	$4,221,007.89	
1924—Reserve Increase	(3,556.00)	63.81	(2,269.08)	
1925 " "	200,429.37	60.48	121,219.68	
1926 " "	547,334.51	62.6	342,631.40	
1927 " "	804,711.36	65.62	528,051.59	
1928 " "	658,769.62	64.74	426,487.45	
1929 " "	823,815.81	65.69	541,164.61	
1930 " "	186,846.55	72.45	135,370.33	
1931 " "	229,100.57	85.75	196,453.74	
1932 " "	342,732.67	100.00	342,732.67	
Total Reserve				$6,852,850.28
Total Assets less Reserve				$31,437,106.20

Defendant's Exhibit D-5—Continued

[fol. 1483] (10)

The Chesapeake and Potomac Telephone Company of Baltimore City

Value of Property as Shown by the Application of Index Numbers Compiled by U. S. Department of Labor—All Commodities

	Amount	Index Translator	Present Value
Court's Value—Dec. 31, 1923	$36,122,912.00		
Less—Working Capital	975,000.00		
	$35,147,912.00	63.8	$22,424,367.86
Fixed Capital—			
1924	3,199,647.74	63.8	2,041,375.26
1925	3,493,428.93	60.5	2,113,524.50
1926	4,098,230.39	62.6	2,565,492.22
1927	2,837,050.66	65.6	1,861,105.23
1928	1,854,045.88	64.7	1,199,567.68
1929	2,205,131.69	65.7	1,448,771.52
1930	2,733,967.63	72.5	1,982,126.53
1931	1,459,483.02	85.8	1,252,236.43
1932	421,707.83	100.	421,707.83
Total	$57,450,605.77		$37,310,275.06
Depreciation Reserve—			
Court's Value—Dec. 31, 1923	$6,614,963.00	63.8	$4,220,346.39
Net Addition—			
1924	(3,556.00)	63.8	(2,268.73)
1925	200,429.37	60.5	121,259.77
1926	547,334.51	62.6	342,631.40
1927	804,711.36	65.6	527,890.65
1928	658,769.62	64.7	426,223.94
1929	823,815.81	65.7	541,246.99
1930	186,846.55	72.5	135,463.75
1931	229,100.57	85.8	196,568.29
1932	342,732.67	100.	342,732.67
Total	$10,405,147.46		$6,852,095.12
Depreciated Value—Dec. 31, 1932	$47,045,458.31		$30,458,179.94

[fol. 1484] (11)

Sheet 2

The Chesapeake and Potomac Telephone Company of Baltimore City

Value as of December 31, 1932, as Shown by the Application of Index Numbers in the Manner Described as the "Gross Additions" Method, Beginning as of July 1, 1914. The Figure to be Trended as of July 1, 1914, Includes $705,-

DEFENDANT'S EXHIBIT D-5—Continued

000 for Going Value and an Increase of 8.22% of Physical Property, Representing Average Increase of Value Found by Commission Over Cost as of That Date.

United States Department of Labor—All Commodities

Gross Value	$ 35,427,904
Depreciation (20.46%)	7,248,549
Net Value	$ 28,179,355

[fol. 1485] (12)

(Sheet 3)

The Chesapeake and Potomac Telephone Company of Baltimore City

Comparison of Values of Buildings as Determined by Company Appraisers and by the Use of the All-Commodities Index Numbers (Bureau of Labor)

	Amount	U. S. All Commodities Translator	Value
Value of Buildings as of December 31, 1923, as Determined by Appraisers for Company	$2,544,201.00		
Plus Undistributed Overheads	152,652.06		
Total	$2,696,853.06	63.8	$1,720,592.25
Net Additions—			
1924	50,237.14	63.8	32,051.30
1925	448,796.24	60.5	271,521.73
1926	244,139.59	62.6	152,831.38
1927	130,588.49	65.6	85,666.05
1928	31,534.94	64.7	20,403.11
1929	186,174.34	65.7	122,316.54
1930	254,943.89	72.5	184,834.32
1931	6,052.39	85.8	5,192.95
1932	(758.41)	100.0	(758.41)
Total—December 31, 1932			$2,594,651.22
Value—December 31, 1932, as determined by Appraisers for Company	$2,391,162.00		
Plus Undistributed Overheads	143,469.72		
Total			$2,534,631.72
Difference (2.31%)			60,019.50

DEFENDANT'S EXHIBIT D-5—Continued

[fol. 1486] (13)

Sheet 4

The Chesapeake and Potomac Telephone Company of Baltimore City

Comparison of Decreases in Values of Liberty-Forest Central Office Building and Store House as Determined by Appraisers for the Company and as Shown by the All-Commodities Index Numbers (Bureau of Labor)

Appraisers for Company

Value—December 31, 1923 (less Architect's fee)	$178,348.00
Value—December 31, 1932 (less Architect's fee)	107,243.00
Decrease	$ 71,105.00
Per Cent Decrease	39.87%
Per Cent Decrease as shown by the Index Number	36.2 %

[fol. 1487] (14)

Sheet 5

Chesapeake and Potomac Telephone Company of Baltimore City

Comparison of Index Number of Major Materials Purchased by the Western Electric Company in One Year with the All-Commodities Index Number of the United States Bureau of Labor Statistics

In a booklet entitled "Things Worth Knowing About the Telephone," issued by the Information Department of the American Telephone and Telegraph Company and dated 1931, the following appears, beginning on page 61:

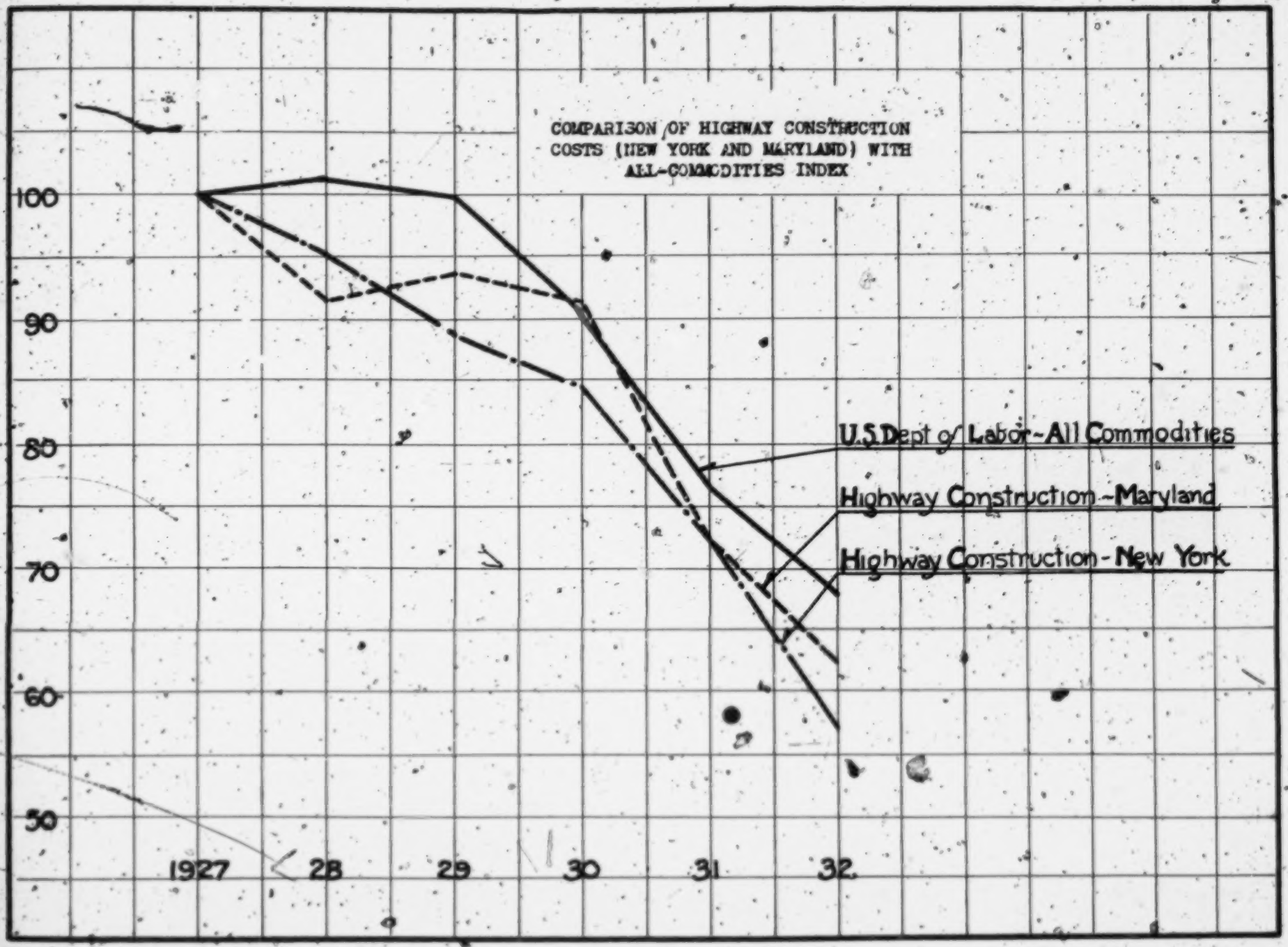
"In a single year the shops transformed into finished telephone apparatus great quantities of material. It is difficult to imagine the labor, the transportation and the outlay required to bring to the doors of the shops the raw and fabricated materials represented by the following figures:

Lead	100,000	tons
Copper	85,000	tons
Steel	26,900	tons
Iron and Steel Wire and Strand	15,000	tons
Antimony	1,900,000	lbs.
Brass Rod, Sheet and Tubing	12,000,000	lbs.
Cable Paper	16,000,000	lbs.
Silk and Cotton	5,500,000	lbs.
Lumber	18,600,000	b.ft."

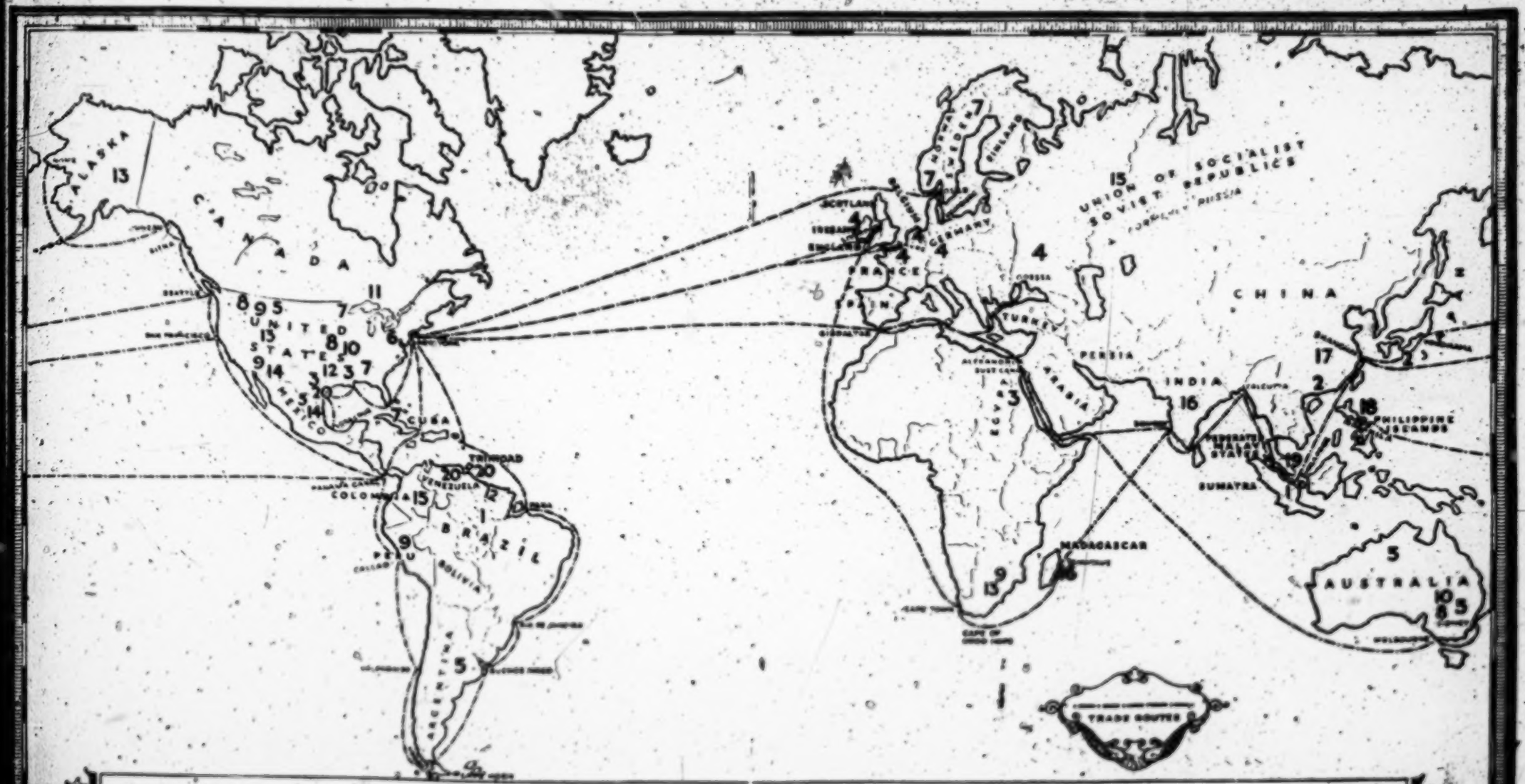
The index number of the above commodities, weighted in accordance with the total value of each, 1926 being taken as 100 in April of 1933 was 44.66

The index number of the All-Commodities Index of the United States Bureau of Labor Statistics, 1926 being taken as 100, in April of 1933 was 60.4

(Here follow photolithographs of side folios 1488 and 1489)


COMPARISON OF HIGHWAY CONSTRUCTION COSTS (NEW YORK AND MARYLAND) WITH ALL-COMMODITIES INDEX
100
90
80
70
60
50
1927
28
29
30
31
32
U.S.Dept of Labor-All Commodities
Highway Construction-Maryland
Highway Construction-New York

The Materials which make up your Telephone and where they come from



1 Rubber
2 Silk
3 Cotton
4 Flax
5 Wood
6 Coal
7 Iron
8 Lead
9 Copper
10 Zinc
11 Nickel
12 Aluminum
13 Gold
14 Silver
15 Platinum
16 Mica
17 Antimony
18 Hemp
19 Tin
20 Asphaltum

Defendant's Exhibit D-5—Continued

[fol. 1490] (19)

The Chesapeake and Potomac Telephone Company of Baltimore City

Value of Property as Shown by the Application of Index Numbers Compiled by the National Association of Purchasing Agents, Inc.—Commodity Price

	Amount	Index Translator	Present Value
Court's Value—Dec. 31, 1923	$36,122,912		
Less—Working Capital	975,000		
	$35,147,912	52.941	$18,607,656.09
Fixed Capital—			
1924	3,199,648	51.429	1,645,546.97
1925	3,493,429	46.667	1,630,278.51
1926	4,098,230	48.092	1,970,920.77
1927	2,837,050	53.617	1,521,141.10
1928	1,854,046	55.263	1,024,601.44
1929	2,205,132	58.879	1,298,359.67
1930	2,733,968	68.478	1,872,166.61
1931	1,459,483	83.444	1,217,850.99
1932	421,708	100.00	421,708.00
Total	$57,450,606		$31,210,230.15
Depreciation Reserve—			
Court's Value—Dec. 31, 1923	$6,614,963	52.941	$3,502,027.56
Net Addition—			
1924	(3,556)	51.429	(1,828.82)
1925	200,429	46.667	93,534.20
1926	547,335	48.092	263,224.35
1927	804,711	53.617	431,461.90
1928	658,770	55.263	364,056.07
1929	823,816	58.879	485,054.62
1930	186,846	68.478	127,948.40
1931	229,100	83.444	191,170.20
1932	342,733	100.00	342,733.00
Total	$10,405,147		$5,799,381.48
Depreciated Value—Dec. 31, 1932	$47,045,459		$25,410,848.67

[fol. 1491] (21)

The Chesapeake and Potomac Telephone Company of Baltimore City

Value of Property as Shown by the Application of Index Numbers Compiled by Dr. Irving Fisher

	Amount	Index Translator	Present Value
Court's Value—Dec. 31, 1923	$36,122,912.00		
Less—Working Capital	975,000.00		
	$35,147,912.00	60.39	$21,225,824
Fixed Capital—			
1924	3,199,648.00	59.353	1,899,087
1925	3,493,429.00	55.798	1,949,264
1926	4,098,230.00	58.524	2,398,448
1927	2,837,050.00	62.314	1,767,879
1928	1,854,046.00	59.776	1,108,275
1929	2,205,132.00	60.955	1,344,138
1930	2,733,968.00	68.019	1,859,618
1931	1,459,483.00	81.189	1,184,940
1932	421,708.00	100.	421,708
Total	$57,450,606.00		$35,159,181

Defendant's Exhibit D-5—Continued

	Amount	Index Translator	Present Value
Depreciation Reserve—			
Court's Value—Dec. 31, 1923	$6,614,963	60.39	$3,994,775
Net Addition—			
1924	(3,556)	59.353	(2,111)
1925	200,429	55.798	111,835
1926	547,335	58.524	320,322
1927	804,711	62.314	501,448
1928	658,770	59.776	393,786
1929	823,816	60.955	502,157
1930	186,846	68.019	127,091
1931	229,100	81.189	186,004
1932	342,733	100.	342,733
Total	$10,405,147		$6,478,041
Depreciated Value—Dec. 31, 1932	$47,045,459		$28,681,140

[fol. 1492] (23)

The Chesapeake and Potomac Telephone Company of Baltimore City

Value of Property as Shown by the Application of Index Numbers Compiled by Dun's

	Amount	Index Translator	Present Value
Court's Value—Dec. 31, 1923	$36,122,912.00		
Less—Working Capital	975,000.00		
	$35,147,912.00	70.511	$24,783,144.00
Fixed Capital—			
1924	3,199,648.00	70.734	2,263,239.00
1925	3,493,429.00	67.729	2,366,065.00
1926	4,098,230.00	72.418	2,967,856.00
1927	2,837,050.00	71.413	2,026,023.00
1928	1,854,046.00	68.879	1,277,048.00
1929	2,205,132.00	70.068	1,545,092.00
1930	2,733,968.00	76.778	2,099,096.00
1931	1,459,483.00	90.903	1,326,714.00
1932	421,708.00	100.	421,708.00
Total	$57,450,606.00		$41,075,975.00
Depreciation Reserve—			
Court's Value—Dec. 31, 1923	$6,614,963.00	70.511	$4,664,277.00
Net Addition—			
1924	(3,556.00)	70.734	(2,515.00)
1925	200,429.00	67.729	135,749.00
1926	547,335.00	72.418	396,269.00
1927	804,711.00	71.413	574,668.00
1928	658,770.00	68.879	453,754.00
1929	823,816.00	70.068	577,231.00
1930	186,846.00	76.778	143,457.00
1931	229,100.00	90.903	208,250.00
1932	342,733.00	100.	342,733.00
Total	$10,405,147.00		$7,498,982.00
Depreciated Value—Dec. 31, 1932	$47,045,459.00		$33,581,993.00

Defendants' Exhibit D-5—Continued

[fol. 1493] (25)

The Chesapeake and Potomac Telephone Company of Baltimore City

Value of Property as Shown by the Application of Index Numbers Compiled by Bradstreet's

	Amount	Index Translator	Present Value
Court's Value—Dec. 31, 1923	$36,122,912.00		
Less—Working Capital	975,000.00		
	$35,147,912.00	51.247	$18,012,250.00
Fixed Capital—			
1924	3,199,648.00	53.512	1,712,196.00
1925	3,493,429.00	49.378	1,724,985.00
1926	4,098,230.00	52.881	2,167,185.00
1927	2,837,050.00	53.883	1,528,688.00
1928	1,854,046.00	51.84	961,137.00
1929	2,205,132.00	54.333	1,198,114.00
1930	2,733,968.00	64.08	1,751,927.00
1931	1,459,483.00	78.6	1,147,154.00
1932	421,708.00	100.	421,708.00
Total	$57,450,606.00		$30,625,344.00
Depreciation Reserve—			
Court's Value—Dec. 31, 1923	$6,614,963.00	51.247	$3,389,970.00
Net Addition—			
1924	(3,556.00)	53.512	(1,903.00)
1925	200,429.00	49.378	98,968.00
1926	547,335.00	52.881	289,436.00
1927	804,711.00	53.883	433,602.00
1928	658,770.00	51.84	341,506.00
1929	823,816.00	54.333	447,604.00
1930	186,846.00	64.08	119,731.00
1931	229,100.00	78.6	180,073.00
1932	342,733.00	100.	342,733.00
Total	$10,405,147.00		$5,641,720.00
Depreciated Value—Dec. 31, 1932	$47,045,459.00		$24,983,624.00

[fol. 1494] (27)

The Chesapeake and Potomac Telephone Company of Baltimore City

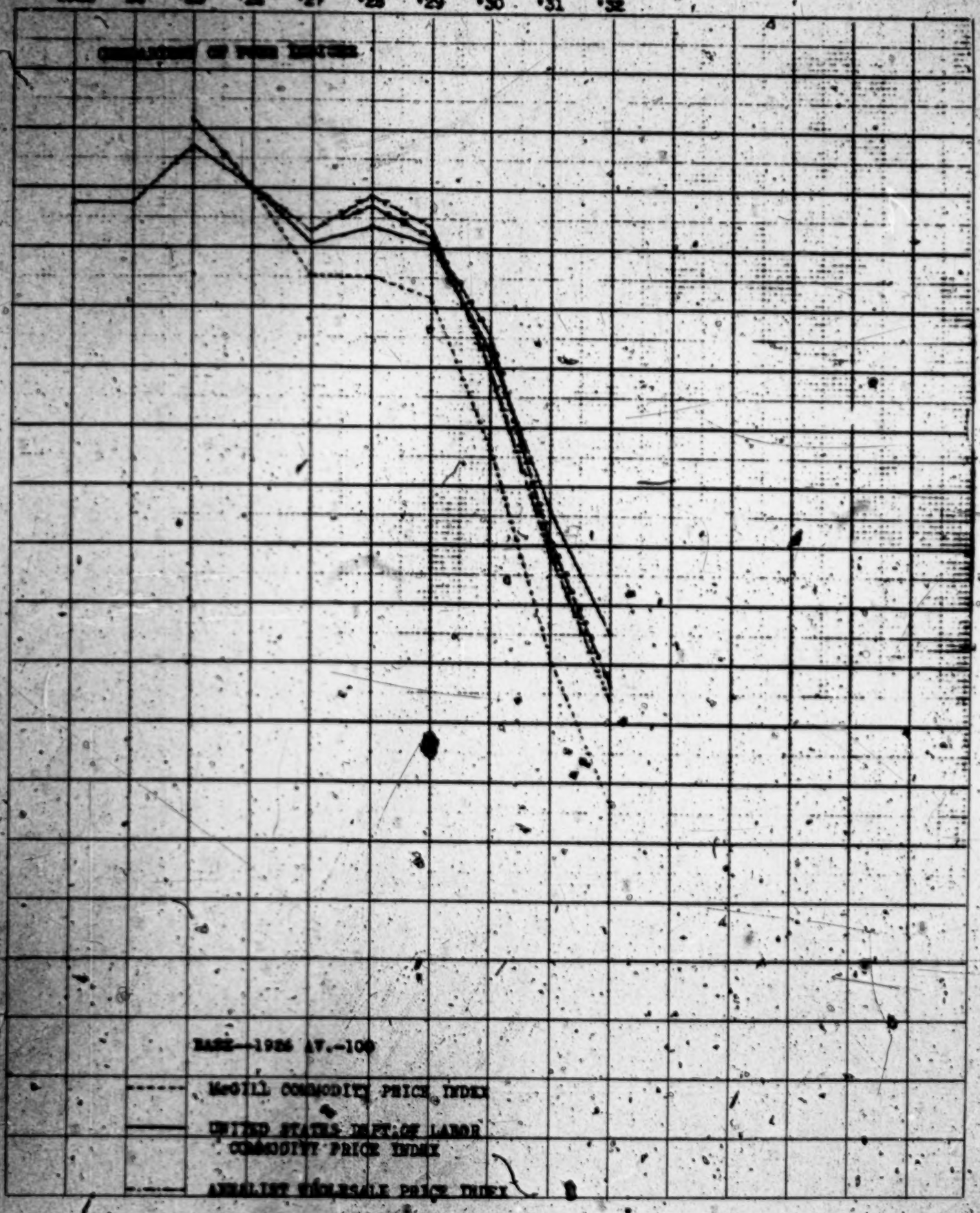
Value of Property as Shown by the Application of Index Numbers Compiled by the Federal Reserve Bank of New York

	Amount	Index Translator	Present Value
Court's Value—Dec. 31, 1923	$36,122,912.00		
Less—Working Capital	975,000.00		
	$35,147,912.00	77.108	$27,101,852
Fixed Capital—			
1924	3,199,648.00	77.108	2,467,185
1925	3,493,429.00	75.294	2,630,342
1926	4,098,230.00	74.854	3,067,689
1927	2,837,050.00	74.854	2,123,645
1928	1,854,046.00	72.727	1,348,392
1929	2,205,132.00	71.508	1,576,846
1930	2,733,968.00	76.19	2,083,010
1931	1,459,483.00	85.333	1,245,421
1932	421,708.00	100.00	421,708
Total	$57,450,606.00		$44,066,090

Defendants' Exhibit D-5—Continued

	Amount	Index Tranalator.	Present Value
Depreciation Reserve—			
Court's Value—Dec. 31, 1923...	$6,614,963	77.108	$5,100,666
Net Addition—			
1924	(3,556)	77.108	(2,742)
1925	200,429	75.294	150,911
1926	547,335	74.854	409,702
1927	804,711	74.854	602,358
1928	658,770	72.727	479,104
1929	823,816	71.508	589,094
1930	186,846	76.19	[illegible],358
1931	229,100	85.333	195,498
1932	342,733	100.	342,733
Total	$10,405,147		$8,009,682
Depreciated Value—Dec. 31, 1932	$47,045,459		$36,056,408

(Here follows photolithograph of side folio 1495.)


DEC. 1923
AV. '24
AV. '25
AV. '26
AV. '27
AV. '28
AV. '29
AV. '30
AV. '31
DEC. '32
110
105
100
95
90
85
80
75
70
65
60
55
50
45
40
35
30
25
20
BASE—1926 AV.=100
McGILL COMMODITY PRICE INDEX
UNITED STATES DEPT. OF LABOR COMMODITY PRICE INDEX
ANNALIST WHOLESALE PRICE INDEX
NATIONAL FERTILIZER ASSOCIATION COMMODITY PRICE INDEX

852A

Defendants' Exhibit D-5—Continued

[fol. 1496] (31)

The Chesapeake and Potomac Telephone Company of Baltimore City

Value of Property as Shown by the Application of Index Numbers Compiled by U. S. Department of Labor—Buidling Materials

	Amount	Index Translator	Present Value
Court's Value—Dec. 31, 1923...	$36,122,912.00		
Less—Working Capital.....	975,000.00		
	$35,147,912.00	68.3	$24,006,023.90
Fixed Capital—			
1924.....	3,199,647.74	69.2	2,214,156.24
1925.....	3,493,428.93	69.6	2,431,426.54
1926.....	4,098,230.39	70.8	2,901,547.12
1927.....	2,837,050.66	74.8	2,122,113.89
1928.....	1,854,045.88	75.2	1,394,242.50
1929.....	2,205,131.69	74.2	1,636,207.71
1930.....	2,733,967.63	78.8	2,154,366.49
1931.....	1,459,483.02	89.4	1,304,777.82
1932.....	421,707.83	100.0	421,707.83
Total.....	$57,450,605.77		$40,586,570.04
Depreciation Reserve—			
Court's Value—Dec. 31, 1923...	$6,614,963.00	68.3	$4,518,019.73
Net Addition—			
1924.....	(3,556.00)	69.2	(2,460.75)
1925.....	200,429.37	69.6	139,498.84
1926.....	547,334.51	70.8	387,512.83
1927.....	804,711.36	74.8	601,924.10
1928.....	658,769.62	75.2	495,394.75
1929.....	823,815.81	74.2	611,271.33
1930.....	186,846.55	78.8	147,235.08
1931.....	229,100.57	89.4	204,815.91
1932.....	342,732.67	100.	342,732.67
Total.....	$10,405,147.46		$7,445,944.49
Depreciated Value—Dec. 31, 1932	$47,045,458.31		$33,140,625.55

[fol. 1497] (32)

Sheet 2

The Chesapeake and Potomac Telephone Company of Baltimore City

Value as of December 31, 1932, as Shown by the Application of Index Numbers in the Manner Described as the "Gross Additions" Method, Beginning as of July 1, 1914. The Figure to be Trended as of July 1, 1914, Includes $705,000 for Going Value and an Increase of

DEFENDANTS' EXHIBIT D 5—Continued

8.229% of Physical Property, Representing Average Increase of Value Found by Commission Over Cost as of That Date

United States Department of Labor—Building Materials

Gross Value	$40,356,363
Depreciation (20.46%)	8,256,919
Net Value	$32,099,444

[fol. 1498] (33)

Sheet 3

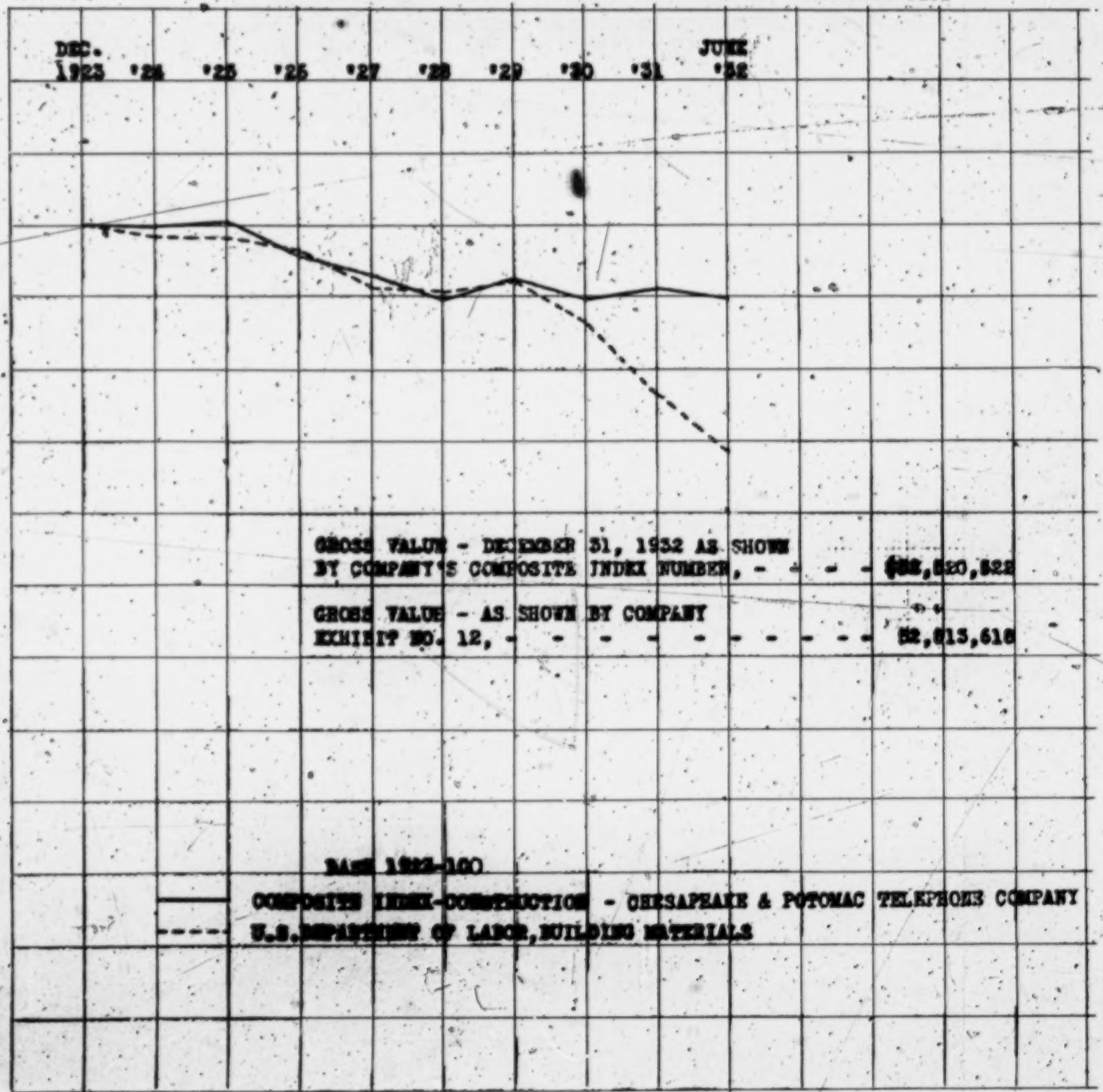
The Chesapeake and Potomac Telephone Company of Baltimore City

Comparison of Values as of December 31, 1923, of Physical Properties as Shown by C. & P. (Gretz) Index Numbers Filed in Case of C. & P. of Baltimore City vs. Whitman et al., with Value Shown by Using Indices of U. S. Building Materials, Applied Back to 1914, Gross Additions Method

	Values
C. & P. Index Numbers	$36,106,848
Building Materials (U. S.)	35,718,819
Difference	$ 388,029
Per Cent Difference	1.075%

(Here follows photograph of side folio 1499)

THE CHESAPEAKE AND POTOMAC TELEPHONE COMPANY OF BALTIMORE CITY



34

Defendants' Exhibit D-5—Continued

[fol. 1500] (36)

The Chesapeake and Potomac Telephone Company of Baltimore City

Value of Property as Shown by the Application of Building Materials Price Index Compiled by the National Association of Purchasing Agents, Inc.

	Amount	Index Translator	Present Value
Court's Value—Dec. 31, 1923...	$36,122,912		
Less—Working Capital.....	975,000		
	$35,147,912	58.974	$20,728,129.62
Fixed Capital—			
1924.....	3,199,648	61.333	1,962,440.11
1925.....	3,493,429	64.486	2,252,772.62
1926.....	4,098,230	66.99	2,745,404.28
1927.....	2,837,050	70.769	2,007,751.91
1928.....	1,854,046	70.769	1,312,0[illegible].81
1929.....	2,205,132	71.875	1,584,938.63
1930.....	2,733,968	85.714	2,343,398.33
1931.....	1,459,483	92.09	1,342,724.36
1932.....	421,708	100.00	421,708.00
Total.....	$57,450,606		$36,701,352.67
Depreciation Reserve—			
Court's Value—Dec. 31, 1923...	$6,614,963	58.974	$3,901,108.28
Net Addition—			
1924.....	(3,556)	61.333	(2,181.00)
1925.....	200,429	64.486	129,248.64
1926.....	547,335	66.99	366,659.72
1927.....	804,711	70.769	569,485.93
1928.....	658,770	70.769	466,204.94
1929.....	823,816	71.875	592,117.75
1930.....	186,846	85.714	160,153.18
1931.....	229,100	92.00	210,772.00
1932.....	342,733	100.00	342,733.00
Total.....	$10,405,147		$6,736,302.44
Depreciated Value—Dec. 31, 1932	$47,045,459		$29,965,050.23

[fol. 1501] (38)

The Chesapeake and Potomac Telephone Company of Baltimore City

Value of Property as Shown by the Application of Index Numbers Compiled by the American Appraisal Company—Construction Costs for Industrial Buildings

	Amount	Index Translator	Present Value
Court's Value—Dec. 31, 1923...	$36,122,912.00		
Less—Working Capital.....	975,000.00		
	$35,147,912.00	67.648	$23,776,880
Fixed Capital—			
1924.....	3,199,648	69.003	2,207,853
1925.....	3,493,429	71.141	2,485,260
1926.....	4,098,230	70.758	2,899,826
1927.....	2,837,050	70.798	2,008,483

DEFENDANTS' EXHIBIT D-5—Continued

	Amount	Index Translator	Present Value
1928	1,854,046	71.141	1,318,987
1929	2,205,132	70.931	1,564,122
1930	2,733,968	73.229	2,002,057
1931	1,459,483	84.769	1,237,189
1932	421,708	100.	421,708
Total	$57,450,606		$39,922,295
Depreciation Reserve—Court's Value—Dec. 31, 1923	$6,614,963	67.648	$4,474,890
Net Addition—			
1924	(3,556)	69.003	(2,454)
1925	200,429	71.141	142,587
1926	547,335	70.758	387,283
1927	804,711	70.793	569,679
1928	658,770	71.141	468,656
1929	823,816	70.931	584,341
1930	186,846	73.229	136,825
1931	229,100	84.769	194,206
1932	342,733	100.	342,733
Total	$10,405,147		$7,298,746
Depreciated Value—Dec. 31, 1932	$47,045,459		$32,623,549

[fol. 1502] (39)

Sheet 2

The Chesapeake and Potomac Telephone Company of Baltimore City

Value as of December 31, 1932, as Shown by the Application of Index Numbers in the Manner Described as the "Gross Additions" Method, beginning as of July 1, 1914. The figure to be Trended as of July 1, 1914, includes $705,000 for Going Value and an Increase of 8.229% of Physical Property, Representing Average Increase of Value Found by Commission Over Cost as of That Date.

American Appraisal Company

Gross Value	$ 40,421,711
Depreciation (20.46%)	8,270,282
Net Value	$ 32,151,429

DEFENDANTS' EXHIBIT D-5—Continued

[fol. 1503] (41)

The Chesapeake and Potomac Telephone Company of Baltimore City

Value of Property as Shown by the Application of Index Numbers Compiled by Consolidated Engineering Company, Inc.

	Amount	Index Translator	Present Value
Court's Value—Dec. 31, 1923	$36,122,912.00		
Less—Working Capital	975,000.00		
	$35,147,912.00	69.81	$24,536,757.37
1924	3,199,647.74	69.22	2,214,796.17
1925	3,493,428.93	74.56	2,604,700.61
1926	4,098,230.39	77.24	3,165,473.15
1927	2,837,050.66	78.47	2,226,223.63
1928	1,854,045.88	77.77	1,441,891.45
1929	2,205,131.69	75.98	1,675,459.06
1930	2,733,967.63	80.13	2,190,736.26
1931	1,459,483.02	86.55	1,263,182.55
1932	421,707.83	100.	421,707.83
Total	$57,450,605.77		$41,740,930.13
Depreciation Reserve—Court's Value—Dec. 31, 1923	$6,614,963.00	69.81	$4,617,905.67
1924	(3,556.00)	69.22	(2,461.46)
1925	200,429.37	74.56	149,440.14
1926	547,334.51	77.24	422,761.18
1927	804,711.36	78.47	631,457.00
1928	658,769.62	77.77	512,325.13
1929	823,815.81	75.98	625,985.26
1930	186,846.55	80.13	149,720.14
1931	229,100.57	86.55	198,266.54
1932	342,732.67	100.	342,732.67
Total	$10,405,147.46		$7,648,102.26
Depreciated Value—Dec. 31, 1932	$47,045,458.31		$34,092,827.87

[fol. 1504] (42)

Sheet 2

The Chesapeake and Potomac Telephone Company of Baltimore City

Value as of December 31, 1932, as Shown by the Application of Index Numbers in the Manner Described as the "Gross Additions" Method, beginning as of July 1, 1914. The figure to be Trended as of July 1, 1914, includes $705,000

DEFENDANTS' EXHIBIT D-5—Continued

for Going Value and an Increase of 8.229% of Physical Property, Representing Average Increase of Value Found by Commission Over Cost as of That Date.

Consolidated Engineering Company

Gross Value	$ 42,982,574
Depreciation (20.46%)	8,794,235
Net Value	$ 34,188,339

[fol. 1805] (44)

The Chesapeake and Potomac Telephone Company of Baltimore City

Value of Property as Shown by the Application of Index Numbers Compiled by the Turner Construction Company, New York

	Amount	Translator	Present Value
Court's Value—Dec. 31, 1923, less Working Capital	$35,147,912	69.39	$24,389,136.14
Fixed Capital—			
1924	3,199,648	70.1	2,242,953.25
1925	3,498,429	69.74	2,436,817.38
1926	4,098,230	69.74	2,858,105.60
1927	2,537,080	71.58	1,708,680.39
1928	1,854,046	71.58	1,327,126.18
1929	2,205,132	73.51	1,620,992.53
1930	2,733,968	82.42	2,253,336.43
1931	1,459,483	93.79	1,368,849.11
1932	421,708	100.00	421,708.00
Total	$57,450,605		$40,627,174.96
Depreciation Reserve—			
Court's Values—Dec. 31, 1923	$6,614,963	69.39	$4,590,122.83
Net Additions—			
1924	(3,556)	70.1	(2,492.76)
1925	200,429	69.74	139,770.18
1926	547,335	69.74	381,711.43
1927	804,711	71.58	576,012.13
1928	658,770	71.58	471,547.57
1929	823,816	73.51	605,587.14
1930	186,846	82.42	153,996.47
1931	229,100	93.79	214,873.89
1932	342,733	100.00	342,733.00
Total	$10,406,147		$7,473,871.88
Depreciated Value—Dec. 31, 1932	$47,043,459		$33,163,308.08

DEFENDANTS' EXHIBIT D-5—Continued

[fol. 1506] (45)

Sheet 2

The Chesapeake and Potomac Telephone Company of Baltimore City

Value as of December 31, 1932, as Shown by the Application of Index Numbers in the Manner Described as the "Gross Additions" Method, beginning as of July 1, 1914. The figure to be Trended as of July 1, 1914, includes $705,000 for Going Value and an Increase of 8.229% of Physical Property, Representing Average Increase of Value Found by Commission Over Cost as of That Date.

Turner Construction Company—Building Cost Index

Gross Value	$ 41,071,087
Depreciation (20.46%)	8,403,144
Net Value	$ 32,667,943

Defendants' Exhibit D-5—Continued

[fol. 1507]

(47)

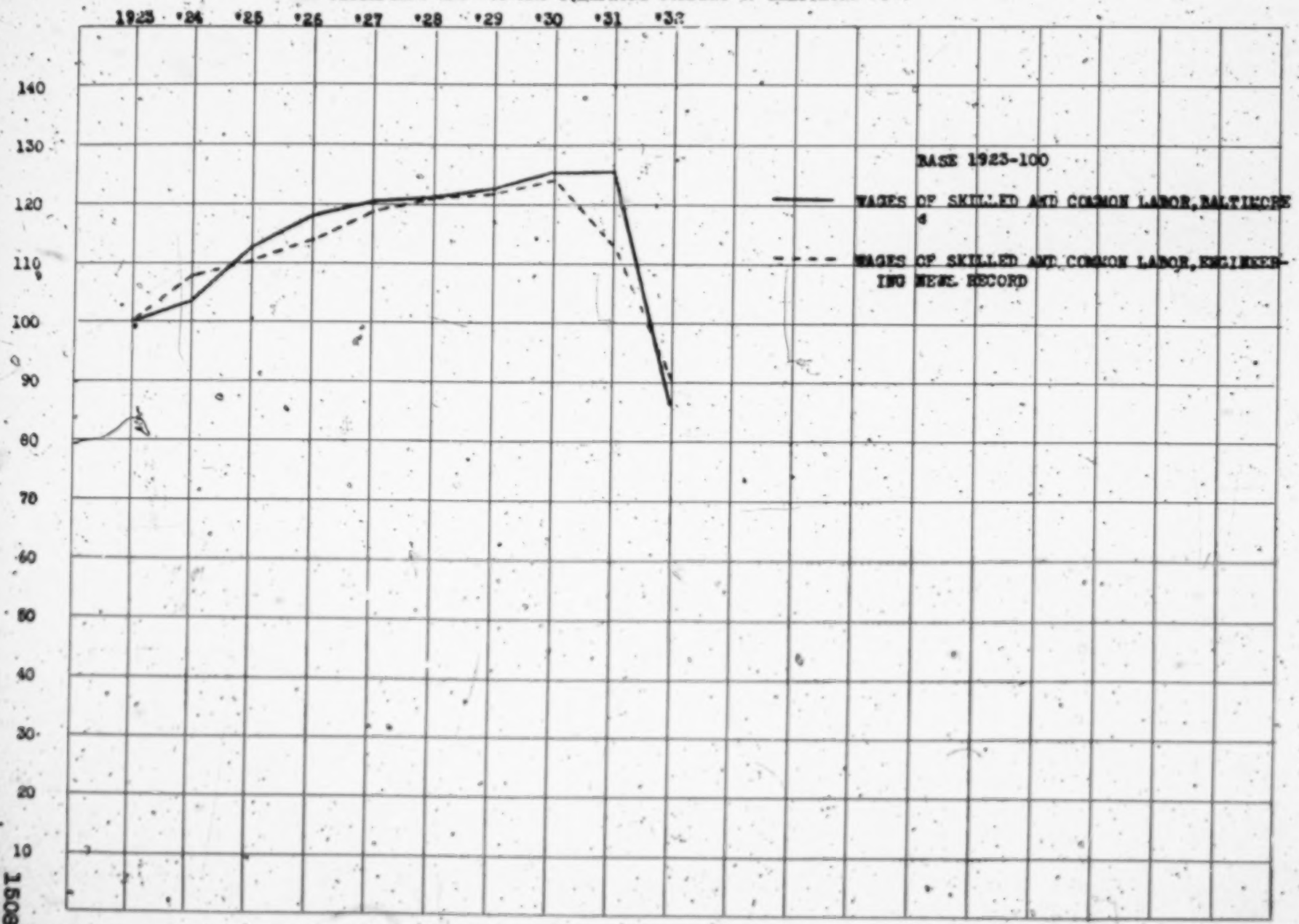
The Chesapeake and Potomac Telephone Company of Baltimore City

Wage Rates (Per Hour) Paid in Baltimore and Vicinity 1923 to 1933

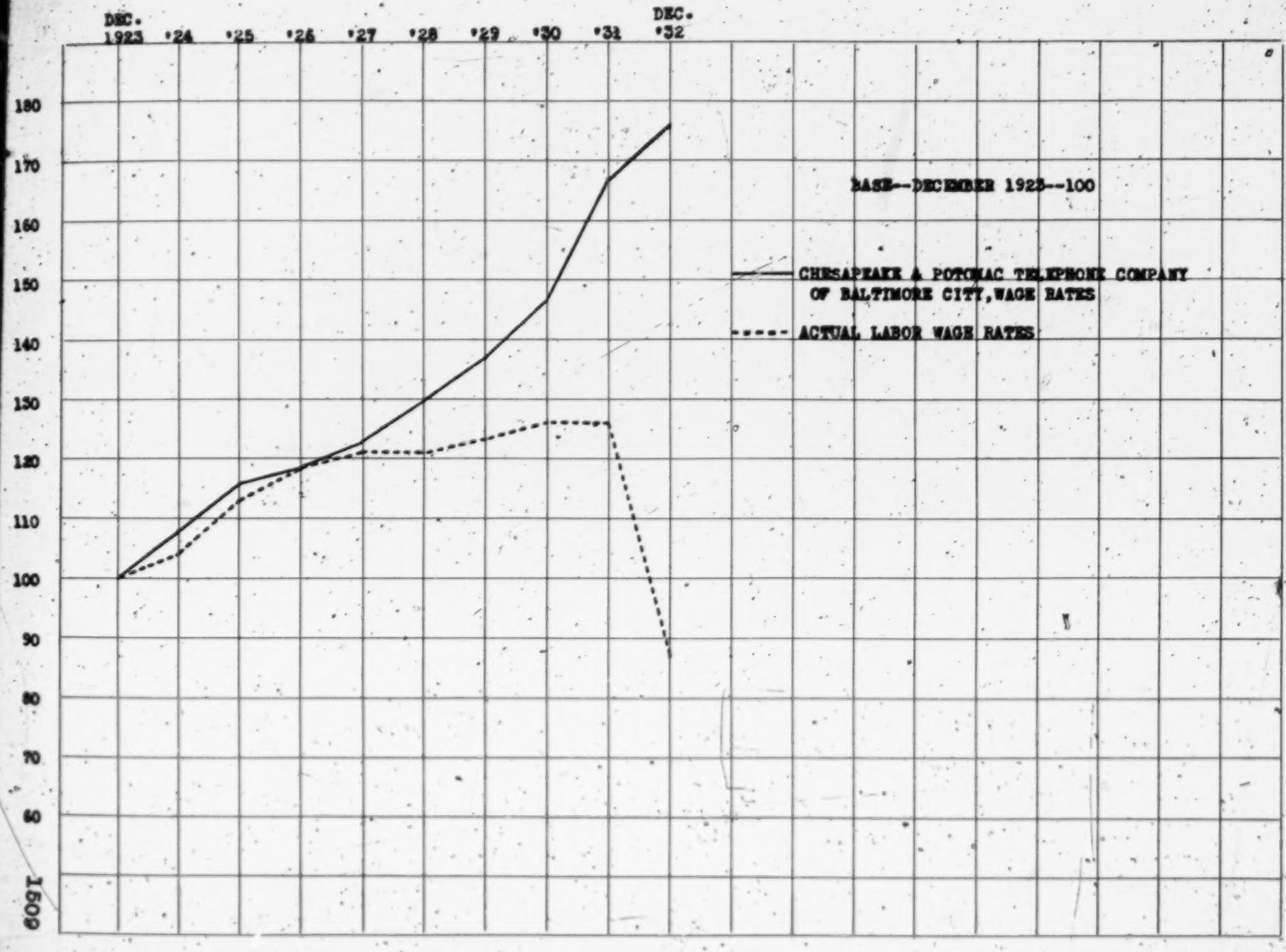
	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
Carpenters	$.85	$.90	$.95	$.95	$1.00	$1.00	$1.00	$.95	$.95	$.95	$.55
Electricians	1.00	1.00	1.10	1.15	1.25	1.25	1.25	1.25	1.25	.80	.60
Common Laborers	.40	.40	.40	.40	.40	.40	.40	.35	.35	.30	.25
Bricklayers	1.25	1.25	1.50	1.63	1.63	1.63	1.63	1.75	1.75	1.25	.75
Cement Workers	1.25	1.25	1.25	1.25	1.25	1.25	1.375	1.375	1.375	.90	.85
Iron Workers	1.25	1.25	1.375	1.375	1.50	1.50	1.50	1.50	1.50	.75	.75
Rodmen	.85	1.00	1.15	1.15	1.15	1.15	1.20	1.30	1.20	.85	.65
Hoisting Engineers	.75	.80	.80	.80	.80	.80	.80	.80	.80	.60	.60
Plasterers	1.50	1.50	1.50	1.75	1.75	1.75	1.75	1.75	1.75	.75	.75
Plumbers	1.06	1.13	1.13	1.25	1.25	1.32	1.38	1.38	1.50	1.50	1.00
Sheet Metal Workers	.95	1.10	1.20	1.30	1.30	1.31	1.31	1.38	1.38	1.13	.85
Stone Masons	1.25	1.25	1.625	1.625	1.625	1.625	1.625	1.75	1.75	1.25	1.00
Total	12.36	12.83	13.98	14.63	14.905	14.985	15.22	15.535	15.555	10.73	8.60
Average	$1.03	$1.07	$1.165	$1.219	$1.242	$1.249	$1.268	$1.293	$1.296	$.894	$.717
Index Translators	69.612	67.009	61.545	58.819	57.729	57.406	56.546	55.367	55.324	80.201	100.

(Here follow photolithographs of side folios 1508 and 1509.)

THE CHESAPEAKE AND POTOMAC TELEPHONE COMPANY OF BALTIMORE CITY



1508


DEC. 1923
'24
'25
'26
'27
'28
'29
'30
'31
DEC. '32
180
170
160
150
140
130
120
110
100
90
80
70
60
50
BASE--DECEMBER 1923--100
CHESAPEAKE & POTOMAC TELEPHONE COMPANY OF BALTIMORE CITY, WAGE RATES
ACTUAL LABOR WAGE RATES

48-a

Defendants' Exhibit D-5—Continued

[fol. 1510] (49)

(Sheet 2)

The Chesapeake and Potomac Telephone Company of Baltimore City

Valuation of Property as Shown by the Application of Index Numbers of Wage Rates

	Amount	Index Translator	Present Value
Court's Value—Dec. 31, 1923	$36,122,912.00		
Less—Working Capital	- 975,000.00		
	$35,147,912.00	69.612	$24,467,164.50
Fixed Capital—Increase—			
1924	3,199,647.74	67.009	2,144,051.95
1925	3,493,428.93	61.545	2,150,030.83
1926	4,098,230.39	58.819	2,410,538.13
1927	2,837,050.66	57.729	1,637,800.98
1928	1,854,045.88	57.406	1,064,333.58
1929	2,205,131.69	56.546	1,246,913.77
1930	2,733,967.63	55.367	1,513,715.86
1931	1,450,483.02	55.324	807,444.39
1932	421,707.83	80.201	338,213.90
Totals	$57,430,605.77		$37,780,207.89
Depreciation Reserves—			
Court's Value—Dec. 31, 1923	$6,614,963.00	69.612	$4,604,808.04
Net Additions—			
1924	(3,556.00)	67.009	(2,382.84)
1925	200,429.37	61.545	123,354.26
1926	547,334.51	58.819	321,936.69
1927	804,711.36	57.729	464,551.82
1928	658,769.62	57.406	378,173.29
1929	823,815.91	56.546	465,834.89
1930	186,846.55	55.367	103,451.33
1931	229,100.57	55.324	126,747.60
1932	342,732.67	80.201	274,875.03
Totals	$10,405,147.46		$6,861,350.11
Depreciated Value—Dec. 31, 1932	$47,045,458.31		$30,918,857.78

[fol. 1511] (51)

The Chesapeake and Potomac Telephone Company of Baltimore City

Approximate Proportion of Labor and Material in Fixed Capital Additions 1924 to 1932 Inclusive

Years	Material	Labor
1924	65.3%	34.7%
1925	63.2	36.8
1926	64.5	35.5

Defendants' Exhibit D-5—Continued

Years	Material	Labor
1927	62.6	37.4
1928	63.9	36.1
1929	65.4	34.6
1930	67.6	32.4
1931	66.7	33.3
1932	65.1	34.9
Weighted Average	64.99%	35.01%

[fol. 1512] (53)

The Chesapeake and Potomac Telephone Company of Baltimore City

Valuation of Property as Shown by the Application of Index Numbers for Building (U. S. Bureau of Labor) and Actual Labor

	Amount	Index Translator	Present Value
Court's Value—Dec. 31, 1923	$36,122,912.00		
Less—Working Capital	975,000.00		
	$35,147,912.00	68.76	$24,167,704.29
Fixed Capital—Additions—			
1924	3,199,647.74	68.44	2,189,838.91
1925	3,493,428.93	66.64	2,328,021.04
1926	4,098,230.39	66.55	2,727,372.32
1927	2,837,050.66	68.41	1,940,826.36
1928	1,854,045.88	68.77	1,275,027.35
1929	2,205,131.69	68.09	1,501,474.17
1930	2,733,967.63	71.21	1,946,858.35
1931	1,459,583.02	78.05	1,139,126.50
1932	421,707.83	93.09	392,567.82
Total	$57,450,605.77		$39,608,817.11
Depreciation Reserve—			
Court's Value—Dec. 31, 1923	$6,614,963.00	68.76	$4,548,448.56
Net Additions—			
1924	(3,556.00)	68.44	(2,433.73)
1925	200,429.37	66.64	133,566.13
1926	547,334.51	66.55	364,351.12
1927	804,711.36	68.41	550,503.04
1928	658,769.62	68.77	453,035.87
1929	823,815.81	68.09	560,936.19
1930	186,846.55	71.21	133,053.43
1931	229,100.57	78.05	178,812.90
1932	342,783.67	93.09	319,049.84
Total	$10,405,147.46		$7,239,223.44
Depreciated Value—Dec. 31, 1932	$47,045,458.31		$32,369,593.67

Defendants' Exhibit D-5—Continued

[fol. 1513] (55)

The Chesapeake and Potomac Telephone Company of Baltimore City

Value of Property as Shown by the Application of Index Numbers Compiled by Engineering News Record

	Amount	Index Translator	Present Value
Court's Value—Dec. 31, 1923..	$36,122,912.00		
Less—Working Capital.....	975,000.00		
	$35,147,912.00	72.7	$25,553,532.03
Fixed Capital—			
1924.....	3,199,647.74	73.6	2,354,940.74
1925.....	3,493,428.98	76.7	2,679,459.99
1926.....	4,068,280.30	76.2	3,123,851.36
1927.....	2,837,080.66	76.8	2,178,854.91
1928.....	1,854,045.88	76.6	1,420,199.14
1929.....	2,205,131.69	76.5	1,686,925.74
1930.....	2,733,967.63	78.1	2,135,326.72
1931.....	1,459,483.02	87.4	1,275,588.16
1932.....	421,707.83	100.0	421,707.83
Total.....	$57,450,605.77		$43,838,388.81
Depreciation Reserve—			
Court's Value—Dec. 31, 1923..	$6,614,963.00	72.7	$4,809,073.10
Net Addition—			
1924.....	(3,556.00)	73.6	(2,617.22)
1925.....	200,429.37	76.7	153,729.33
1926.....	547,334.51	76.2	417,068.90
1927.....	804,711.26	76.8	618,018.32
1928.....	658,760.62	76.6	504,617.53
1929.....	822,815.81	76.5	630,219.09
1930.....	186,846.55	78.1	145,937.16
1931.....	229,100.57	87.4	200,233.90
1932.....	342,732.67	100.0	342,732.67
Total.....	$10,406,147.46		$7,819,007.78
Depreciated Value—Dec. 31, 1932	$47,045,458.31		$35,009,381.03

[fol. 1514] (56)

Sheet 2

The Chesapeake and Potomac Telephone Company of Baltimore City

Value as of December 31, 1932, by applying the Index Translators Used by Statutory Court to Commission's Value as of June 30, 1914, of That Part of Property Valued in 1914 and Deemed Still to be In Service as of December 31, 1932, Plus Property Acquired from June 30, 1914, to

DEFENDANT'S EXHIBIT D-5—Continued

December 31, 1932, and Deemed Still to be In Service as of December 31, 1932, in Order to Arrive at a Value as of December 31, 1923, by Court Method of Such Property, and by Applying Engineering News Record Index Numbers to the Above Trended Value as of December 31, 1923, and Also to Cost of Subsequent Additions.

Gross Value	$40,391,922.79
Less Depreciation (20.46%)	8,264,187.40
Depreciated Value December 31, 1932	$32,127,735.39

[fol. 1515] (57)

Sheet 3

The Chesapeake and Potomac Telephone Company of Baltimore City

Value as of December 31, 1932, as Shown by the Application of Index Numbers in the Manner Described as the "Gross Additions" Method, beginning as of July 1, 1914. The figure to be Trended as of July 1, 1914, includes $705,000 for Going Value and an Increase of 8.229% of Physical Property, Representing Average Increase of Value Found by Commission Over Cost as of That Date.

Engineering News Record

Gross Value	$43,901,938
Depreciation (20.46%)	8,982,337
Net Value	$34,919,601

Defendant's Exhibit D-5—Continued

[fol. 1516] (59)

The Chesapeake and Potomac Telephone Company of Baltimore City

Value of Property as Shown by the Application of Index Numbers (Old Series) Compiled by Dr. Albert S. Richey, of Worcester Polytechnic Institute

	Amount	Index Translator	Present Value
Court's Value—Dec. 31, 1923	$36,122,912.00		
Less—Working Capital	975,000.00		
	$35,147,912.00	75.3	$26,466,377.74
Fixed Capital—			
1924	3,199,647.74	75.2	2,406,135.10
1925	3,498,426.93	76.8	2,682,953.42
1926	4,068,280.39	76.5	3,135,146.25
1927	2,837,060.66	77.5	2,196,714.26
1928	1,854,045.88	76.5	1,418,345.10
1929	2,305,131.69	74.5	1,643,823.11
1930	2,733,967.63	77.2	2,110,623.01
1931	1,459,483.02	87.8	1,281,426.09
1932	421,707.83	100.0	421,707.83
Total	$57,450,605.77		$43,764,251.91
Depreciation Reserve—			
Court's Value—Dec. 31, 1923	$6,614,963.00	75.3	$4,981,067.14
Net Addition—			
1924	(3,556.00)	75.2	(2,674.11)
1925	200,429.37	76.8	153,929.76
1926	547,334.51	76.5	418,710.90
1927	804,711.36	77.5	623,651.30
1928	658,769.62	76.5	503,958.76
1929	823,815.81	74.8	613,742.78
1930	186,846.55	77.2	144,245.54
1931	229,100.57	87.8	201,150.30
1932	342,732.67	100.0	342,732.67
Total	$10,406,147.46		$7,980,515.04
Depreciated Value—Dec. 31, 1932	$47,045,458.31		$35,763,736.87

[fol. 1517] (60)

Sheet 2

The Chesapeake and Potomac Telephone Company of Baltimore City

Value as of December 31, 1932, as Shown by the Application of Index Numbers in the Manner Described as the "Gross Additions" Method, beginning as of July 1, 1914. The figure to be Trended as of July 1, 1914, includes $705,000

DEFENDANT'S EXHIBIT D-5—Continued

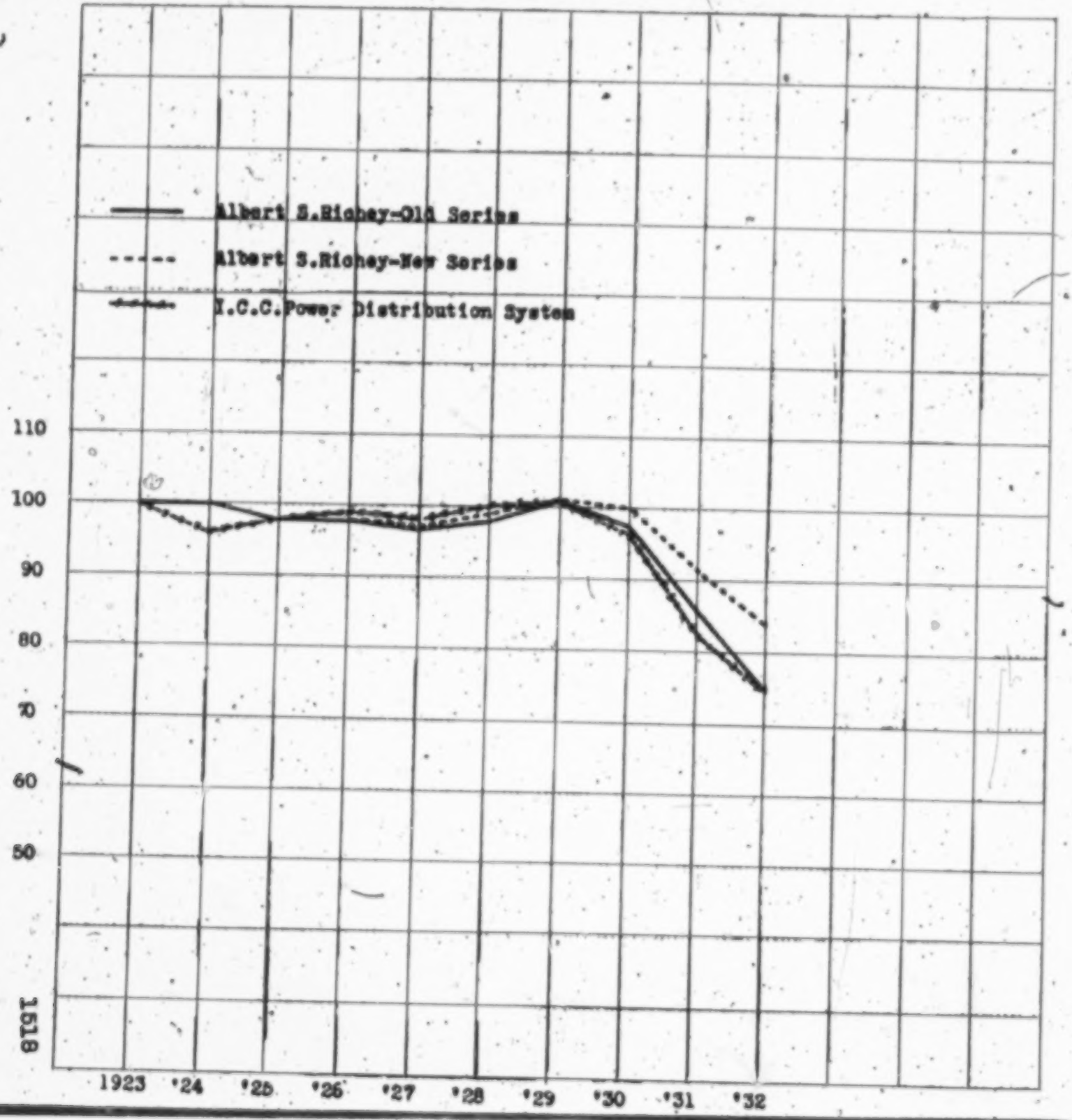
for Going Value and an Increase of 8.229% of Physical Property, Representing Average Increase of Value Found by Commission Over Cost as of That Date.

Albert S. Richey—Old Series

Gross Value	$42,457,390
Depreciation (20.46%)	8,686,782
Net Value	$33,770,608

(Here follows photolithograph of side folio 1518)

THE CHESAPEAKE AND POTOMAC TELEPHONE COMPANY OF BALTIMORE CITY



19

Defendants' Exhibit D-5—Continued

[fol. 1519] (63)

The Chesapeake and Potomac Telephone Company of Baltimore City

Value of Property as Shown by the Application of Index Numbers Compiled by the Interstate Commerce Commission for Telegraph and Telephone Lines

	Amount	Index Translator	Present Value
Court's Value—Dec. 31, 1923	$36,122,912		
Less—Working Capital	975,000		
	$35,147,912	64.171	$22,554,766.61
Fixed Capital—			
1924	3,199,648	67.416	2,157,074.70
1925	3,493,429	75.00	2,620,071.75
1926	4,098,230	76.923	3,152,481.46
1927	2,837,050	74.074	2,101,516.42
1928	1,854,046	72.289	1,340,271.31
1929	2,205,132	71.006	1,565,770.03
1930	2,733,968	76.433	2,089,653.76
1931	1,459,483	79.47	1,159,851.14
1932	421,708	100.00	421,708.00
Total	$57,450,606		$39,163,171.18
Depreciation Reserve—			
Court's Value—Dec. 31, 1923	$6,614,963	64.171	$4,244,887.91
Net Additions—			
1924	(3,356)	67.416	(2,397.31)
1925	200,429	75.00	150,321.75
1926	547,335	76.923	421,026.50
1927	804,711	74.074	596,081.63
1928	658,770	72.289	476,218.24
1929	823,816	71.006	584,958.79
1930	186,846	76.433	142,812.00
1931	229,100	79.47	182,065.77
1932	342,733	100.00	342,733.00
Total	$10,405,147		$7,138,708.28
Depreciated Value—Dec. 31, 1932	$47,045,459		$32,024,462.90

[fol. 1520] (64)

Sheet 2

The Chesapeake and Potomac Telephone Company of Baltimore City

Value as of December 31, 1932, as Shown by the Application of Index Numbers in the Manner Described as the "Gross Additions" Method, Beginning as of July 1, 1914. The Figure to be Trended as of July 1, 1914, Includes $705,000 for Going Value and an Increase of 8.229% of Physical Property, Representing Average Increase of Value Found by Commission Over Cost as of That Date.

DEFENDANTS' EXHIBIT D-5—Continued

Interstate Commerce Commission—Telephone and Telegraph

Gross Value	$ 39,705,118
Depreciation (20.46%)	8,123,667
Net Value	$ 31,581,451

[fol. 1521] (65)

Sheet 3

The Chesapeake and Potomac Telephone Company of Baltimore City

Comparison of Values as of December 31, 1923, of Physical Properties as Shown by C. & P. (Gretz) Index Numbers Filed in Case of C. & P. of Baltimore City vs. Whitman et al., with Value Shown by Using Indices of U. S. Building Materials, Applied Back to 1914, Gross Additions Method.

	Values
C. & P. Index Numbers	$ 36,106,848
Interstate Commerce Commission Telephone and Telegraph	36,454,295
Difference	$ 347,447
Per Cent Difference	0.962%

[fol. 1522] (67)

The Chesapeake and Potomac Telephone Company of Baltimore City

Value of Property as Shown by the Application of Index Numbers as Contained in Company P.S.C. Exhibit No. 35 Without Recognizing Price Increases Since 1920

	Amount	Translator	Present Value
Court's Value—Dec. 31, 1923 less working capital	$35,147,912	66.48	$23,366,331.90
1924	3,199,648	70.48	2,255,111.91
1925	3,493,429	71.25	2,489,368.16
1926	4,098,230	78.	3,196,619.40
1927	2,837,050	93.24	2,645,265.42
1928	1,854,046	91.41	1,694,783.45
1929	2,205,132	100.00	2,205,132.00
1930	2,733,968	100.00	2,733,968.00
1931	1,459,483	100.00	1,459,483.00
1932	421,708	100.00	421,708.00
Total	$57,450,606		$42,467,471.24

DEFENDANT'S EXHIBIT D-5—Continued

	Amount	Translator	Present Value
Depreciation Reserve—Court's Value—Dec. 31, 1923	$6,614,963	66.46	$4,397,627.40
1924	(3,556)	70.48	(2,506.27)
1925	200,429	71.25	142,805.66
1926	547,335	78.	426,921.30
1927	804,711	93.24	750,312.54
1928	658,770	91.41	602,181.66
1929	823,816	100.00	823,816.00
1930	186,846	100.00	186,846.00
1931	229,100	100.00	229,100.00
1932	342,733	100.00	342,733.00
Total	$10,405,147		$7,899,837.29
Depreciated Value—Dec. 31, 1932	$47,045,450		$34,567,633.95

DEFENDANTS' EXHIBIT D-5—Continued

[fol. 1523]

(69)

The Chesapeake and Potomac Telephone Company of Baltimore City

Value of Property by Accounts Established by the Various Methods Indicated. (Value Is Exclusive of Working Capital and a Separate Allowance for Going Value)

	Present Value	Valuation Method
Land	$456,488.88	U. S. Department of Labor—All-Commodities Index.
Buildings	2,517,811.66	I.C.C. Index for Station and Office Buildings.
Central Office Telephone Equipment Other Equipment of Central Office	8,591,578.26	I.C.C. Telephone Equipment Index.
Pole Lines	4,030,829.89	I.C.C. Telephone Pole Line Index.
Aerial Cable Underground and Submarine Cable	10,263,210.69	I.C.C. Account "Miscellaneous" of which 92.44% is cable.
Station Equipment	6,056,942.24	I.C.C. Telephone Equipment Index.
Aerial Wire	2,737,968.97	I.C.C. Telephone Wire Index.
Underground Conduits	4,359,079.58	I.C.C. Underground Conduit Index.
Right of Way	934,220.20	Book Value.
Interest during Construction	337,636.69	Book Value.
General Equipment	672,412.00	Company's Value.
Gross Value—December 31, 1932	$40,958,179.06	
Less Depreciation (20.46%)	8,380,043.44	
Depreciated Value—December 31, 1932	$32,578,135.62	

The Chesapeake and Potomac Telephone Company of Baltimore City

Computation of Values as of December 31, 1933, by the Various Index Numbers

Index	Value Dec. 31, 1932	Increase in Index from Dec. 31, 1932 to Dec. 31, 1933	Value of Property Owned Dec. 31, 1932 as of Dec. 31, 1933	Less Net Decrease in Property and Increase in Depreciation Reserve 1933	Value of Property Dec. 31, 1933
U. S. Dept. of Labor—All-Commodities—Total Assets	$31,437,106.20	13.10%	$35,555,367.11	$1,222,913.65	$34,332,453.46
U. S. Dept. of Labor—All-Commodities—Fixed Capital	30,458,179.94	13.10	34,448,201.51	1,222,913.65	33,225,287.86
National Association of Purchasing Agents, Inc., Commodity Price—Fixed Capital	25,410,848.67	Ceased compiling indices in 1932.			
Dr. Irving Fisher—Fixed Capital	28,681,140.00	22.66	35,180,286.32	1,222,913.65	33,957,372.67
Dun's—Fixed Capital	33,831,993.00	19.12	40,002,870.06	1,222,913.65	38,779,956.41
Bradstreet's—Fixed Capital	24,963,624.00	27.99	31,976,540.36	1,222,913.65	30,753,626.71
Federal Reserve Bank of New York—Fixed Capital	36,056,408.00	3.13	37,184,973.57	1,222,913.65	35,962,059.92
U. S. Dept. of Labor—Building Materials—Fixed Capital	33,140,625.55	20.9	40,067,016.29	1,222,913.65	38,844,102.64
National Association of Purchasing Agents, Inc., Material Price—Fixed Capital	29,965,050.23	Ceased compiling indices in 1932.			
American Appraisal Company—Fixed Capital	32,628,549.00	5.74	34,496,140.71	1,222,913.65	33,273,227.06
Consolidated Engineering Co., Inc—Fixed Capital	34,092,827.57	16.89	39,851,106.50	1,222,913.65	38,628,192.85
Turner Construction Company—Fixed Capital	33,153,303.08	10.29	36,564,777.97	1,222,913.65	35,341,864.32
Engineering News Record—Fixed Capital	35,009,281.03	20.71	42,250,703.13	1,222,913.65	41,030,789.48
Dr. Albert S. Richey—Fixed Capital	35,783,736.87	Index numbers not available.			
Interstate Commerce Commission—Fixed Capital	32,024,462.90	Index numbers for December, 1933, not available.			

[fol. 1525] (73)

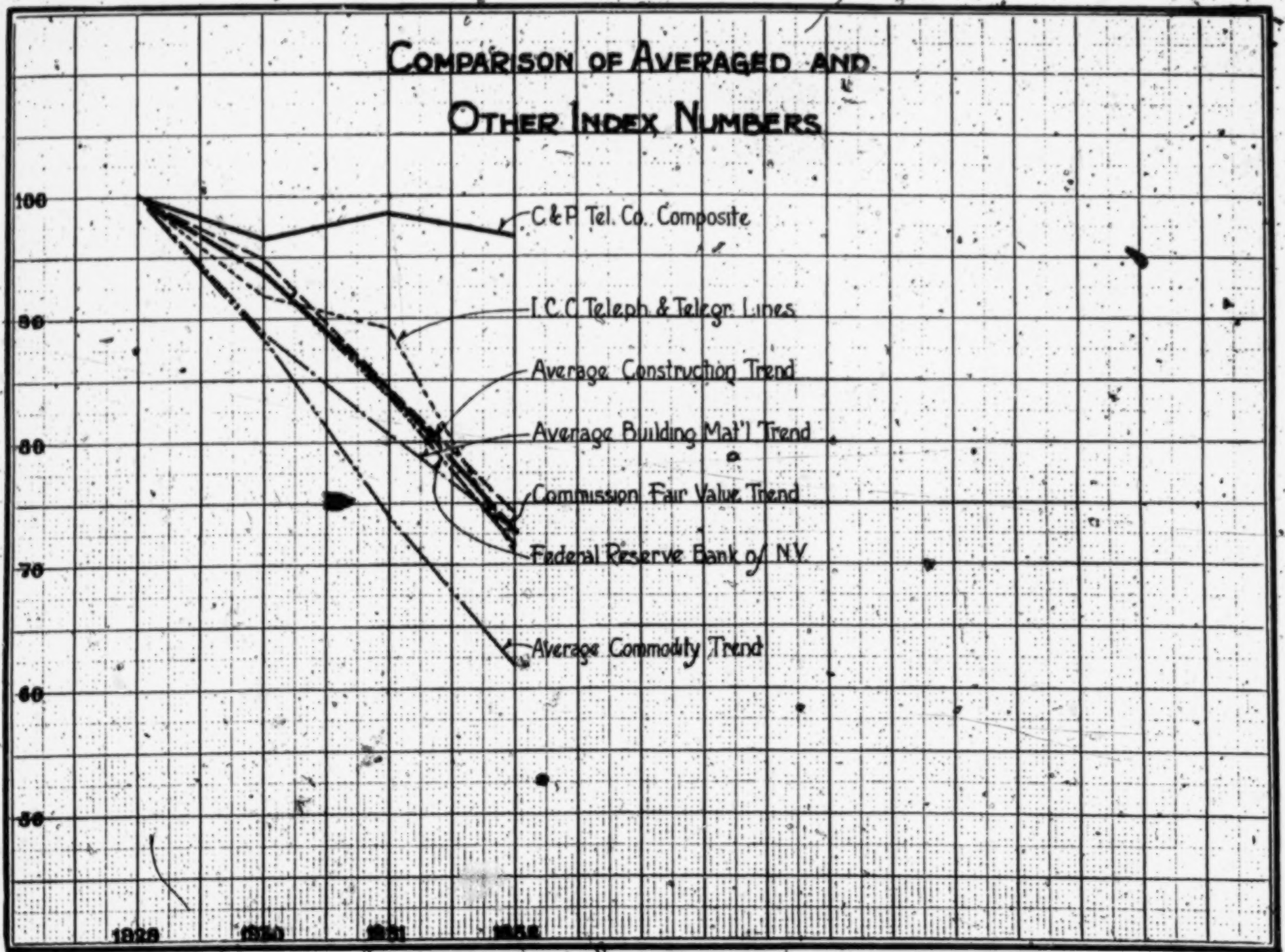
The Chesapeake and Potomac Telephone Company of Baltimore City

Value of Intrastate Property—December 31, 1933

Index	Total Value of Property	Per Cent Allocated to Intrastate	Value of Intrastate Property
U. S. Department of Labor—All Commodities—Total Assets	$34,332,453.46	85%	$29,182,585.44
U. S. Department of Labor—All Commodities—Fixed Capital	33,225,287.86	85%	28,241,494.68
Dr. Irving Fisher—Fixed Capital	33,957,372.67	85%	28,863,766.77
Dun's—Fixed Capital	38,779,956.41	85%	32,962,962.95
Bradstreets—Fixed Capital	30,753,636.71	85%	26,140,582.70
Federal Reserve Bank of New York —Fixed Capital	35,962,059.92	85%	30,567,750.93
U. S. Department of Labor—Building Materials—Fixed Capital	38,844,102.64	85%	33,017,487.24
American Appraisal Company—Fixed Capital	33,273,227.06	85%	28,282,243.00
Consolidated Engineering Company, Inc.—Fixed Capital	38,628,192.85	85%	32,833,963.92
Turner Construction Company—Fixed Capital	35,341,864.32	85%	30,040,584.67
Engineering News Record—Fixed Capital	41,036,789.48	85%	34,881,271.06
I.C.C. Telegraph and Telephone Lines—Fixed Capital	32,024,462.90	85%	27,220,793.47
Western Electric Index—Fixed Capital	34,567,633.95	85%	29,382,488.86
Working Capital	736,820.00	85%	626,297.00

(Here follows photolithograph of side folio 1526.)

Comparison of Averaged and Other Index Numbers



[fol. 1527]

DEFENDANT'S EXHIBIT D-6

Overheads Included in Original Cost

[fol: 1528]

The Chesapeake and Potomac Telephone Company of Baltimore City

Statement of Supervision Rates Applicable to "Construction" for Year 1932 (Based upon Direct Labor)

Account		Percentages by Months											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
690	General Expense Charged Construction	.1007	.1007	.1007	.1007	.1025	.1025	.1025	.1025	.1279	.1279	.1279	.1279
703-02	Tool Expense	.0435	.0463	.0406	.0464	.0347	.0430	.0399	.0397	.0324	.0371	.0244	.0357
705	General Engineering Expense	.1067	.0957	.0546	.1829	.1902	.2476	.2390	.2566	.2674	.3202	.2857	.2685
706-01	Plant Supervision Expense (Supt.)	.0777	.0797	.0675	.0760	.0637	.0593	.0600	.0583	.0592	.0692	.0556	.0642
706-02	Plant Supervision Expense (Engineering)	.1686	.1495	.1102	.2177	.1761	.1595	.1673	.1610	.1760	.2268	.1696	.1921
	Total	.4972	.4719	.3736	.6237	.5672	.6119	.6087	.6181	.6629	.7812	.6632	.6884

Note—The amount in Account 690 is taken from the following accounts:

661 Salaries of General Officers.
662 Salaries of General Office Clerks.
664 Expenses of General Officers and Clerks.
665 General Office Stationery and Printing.
666 Other General Office Supplies and Expenses.
667 General Law Expenses.

Account 705 includes amounts transferred from Traffi Expenses and General Commercial Administration Expenses.

(Here follows table, side folio 1529.)

[fol. 1529]

Sheet 2

The Chesapeake and Potomac Telephone Company of Baltimore City

Statement of Loading Rates Applied to Contractors' Bills for Year 1932

Construction

Class of Plant	Detail of Loading	Percentages Applied to Bills											
		Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Outside Plant	Acct. 690 Gen. Expense Charged Construction	1.036	1.036	1.036	1.086	1.336	1.336	1.336	1.336	.259	.259	.259	.259
	Acct. 705 Gen. Engineering Expense	4.000	4.000	4.000	7.000	7.000	10.000	10.000	8.000	8.000	8.000	8.000	8.000
	Acct. 706-02 Plt. Supv. Expense (Engineering)	10.964	10.964	10.964	10.964	12.664	[illegible]	12.664	12.664	23.741	23.741	23.741	23.741
	Total	16.000	16.000	16.000	19.000	21.000	24.000	24.000	22.000	32.000	32.000	32.000	32.000
Real Estate Purchases	Acct. 690 Gen. Expense Charged Construction	1.036	1.036	1.036	1.036	1.336	1.336	1.336	1.336	.259	.259	.259	.259
	Acct. 705 Gen. Engineering Expense	3.000	3.000	3.000	3.000	3.000	3.000	3.000	3.000	3.000	3.000	3.000	3.000
	Total	4.036	4.036	4.036	4.036	4.336	4.336	4.336	4.336	3.259	3.259	3.259	3.259
Building Construction	Acct. 690 Gen. Expense Charged Construction	1.036	1.036	1.036	1.036	1.336	1.336	1.336	1.336	.259	.259	.259	.259
	Acct. 705 Gen. Engineering Expense	7.000	7.000	7.000	12.000	12.000	15.000	15.000	15.000	15.000	15.000	15.000	15.000
	Total	8.036	8.036	8.036	13.036	13.336	16.336	16.336	16.336	15.259	15.259	15.259	15.259
Central Office Tel. Equipment—Manual	Acct. 690 Gen. Expense Charged Construction	1.036	1.036	1.036	1.036	1.336	1.336	1.336	1.336	.259	.259	.259	.259
	Acct. 705 Gen. Engineering Expense	15.000	15.000	15.000	25.000	25.000	32.000	16.000	16.000	16.000	16.000	16.000	16.000
	Total	16.036	16.036	16.036	26.036	26.336	33.336	17.336	17.336	16.259	16.259	16.259	16.259
Central Office Tel. Equipment—Dial	Acct. 690 Gen. Expense Charged Construction	1.036	1.036	1.036	1.036	1.336	1.336	1.336	1.336	.259	.259	.259	.259
	Acct. 705 Gen. Engineering Expense	12.000	12.000	12.000	21.000	21.000	28.000	14.000	14.000	14.000	14.000	14.000	14.000
	Total	13.036	13.036	13.036	22.036	22.336	29.336	15.336	15.336	14.259	14.259	14.259	14.259
Mult. & Dial P. B. X. Equipment	Acct. 690 Gen. Expense Charged Construction	1.036	1.036	1.036	1.036	1.336	1.336	1.336	1.336	.259	.259	.259	.259
	Acct. 705 Gen. Engineering Expense	15.000	15.000	15.000	25.000	25.000	32.000	16.000	16.000	16.000	16.000	16.000	16.000
	Total	16.036	16.036	16.036	26.036	26.336	33.336	17.336	17.336	16.259	16.259	16.259	16.259

DEFENDANTS' EXHIBIT D-6—Continued

[fol. 1530] Sheet 3

The Chesapeake and Potomac Telephone Company of Baltimore City

Statement of Yearly Composite Supervision Rates Applied to Construction (Based upon Direct Labor)

Year	Per cent
1924	.58
1925	.44
1926	.46
1927	.50
1928	.49
1929	.52
1930	.49
1931	.49
1932	.58

[fol. 1531] DEFENDANT'S EXHIBIT No. D-7

Depreciation Reserve

[fol. 1532] (2)

The Chesapeake and Potomac Telephone Company of Baltimore City

Ratio of Depreciation Reserve to Fixed Capital

Year	Per cent
June 30, 1910	5.26
" " 1911	10.52
" " 1912	13.45
" " 1913	14.13
" " 1914	14.77
" " 1915	16.17
" " 1916	17.89
" " 1917	19.85
Dec. 31, 1917	20.58
" " 1918	19.50
" " 1919	21.40
" " 1920	22.55

DEFENDANTS' EXHIBIT D-7—Continued

Year	Per cent
Dec. 31, 1921	24.07
" " 1922	24.58
" " 1923	23.26
" " 19	20.84
" " 1925	19.30
" " 1926	18.67
" " 1927	19.34
" " 1928	20.03
" " 1929	20.87
" " 1930	20.08
" " 1931	19.95
" " 1932	20.46

[fol. 1533] (4)

The Chesapeake and Potomac Telephone Company of Baltimore City

Amended Reserve for Depreciation

Depreciation Reserve as of December 31, 1932, computed by applying Company's depreciation rates effective April 1, 1933, to that portion of the property added each year from 1914 to 1932 which is deemed to have been in existence on December 31, 1932 ..... $13,906,185.94

Note:—The method employed is termed the straight-line method. The depreciation rates have been applied to cost of property, classified according to fixed capital accounts.

[fol. 1534]

DEFENDANTS' EXHIBIT D-8

Earnings of Western Electric Company

[fol. 1535]

(2)

The Chesapeake and Potomac Telephone Company of Baltimore City

Comparison of Earnings for Years 1927 to 1932 Inclusive of Leading Industrial Corporations with the Western Electric Company
(In Million of Dollars)

	1927	1928	1929	1930	1931	1932	Total
Property and Investments, less Depreciation Reserve, of 442 Leading Industrial Corporations for the years 1927 to 1931, and of 399 Leading Industrial Corporations for the year 1932	$16,136	$16,931	$18,457	$19,560	$19,649	$13,365	$104,098
Net Profits before Fixed Charges of above Corporations	$2,216	$2,865	$3,248	$1,932	$819	$148	$11,228
Per Cent Earned	13.7	16.9	17.6	9.9	4.2	1.1	10.78
Western Electric Company—							
Property and Investments, less Depreciation Reserve	$65.6	$67.6	$132.0	$164.0	$165.2	$154.8	$749.2
Net Profit	$19.3	$22.0	$31.5	$20.3	$15.5	$ (9)	$99.6
Per Cent Earned	29.42	32.54	23.87	12.38	9.38	(5.81)	13.29

Note—There has been excluded from Western Electric Company's Net Profits $9,938,000 representing Special Income.

Defendants' Exhibit D-8—Continued

[fol. 1536]

(4)

The Chesapeake and Potomac Telephone Company of Baltimore City

Per Cent of Return on Capital Stocks and Surplus of Electrical Manufacturing Corporations Listed in Moody's Manual of Industrials for 1933

	1932	1931	1930	1929	1928	1927	1926	1925	1924	Average
Allis Chalmers Manufacturing Company	(5.79)	2.23	6.75	9.16	7.03	7.85	6.25	6.02	5.75	4.90
Anaconda Wire & Cable Company	(5.85)	0.096	1.345	9.53	10.20	.....	.....	.....	.....	3.23
Arrow-Hart & Hegeman Electric Company	(2.78)	3.51	6.73	16.20	15.79	.....	.....	.....	.....	8.61
Benjamin Electric Manufacturing Company	(10.73)	7.96	10.12	8.31	(9.03)	5.46	.....	6.02	3.94	3.02
Canada Wire & Cable Company, Ltd	(4.11)	3.89	10.06	14.23	.....	.....	.....	.....	.....	5.84
Canadian Westinghouse Company, Ltd	4.27	10.87	17.11	21.53	21.81	13.41	11.70	9.75	10.63	13.56
Century Electric Company	(7.62)	(0.89)	(1.61)	8.53)	8.48)	10.91	14.32	15.49	6.07	5.69
Claude Neon Elec. Products Corp., Ltd	13.01	21.69	25.09	35.21	18.10	.....	.....	.....	.....	22.09
Claude Neon Lights, Inc	(5.22)	(1.49)	.....	.....	.....	.....	.....	.....	.....	(2.80)
Continental Diamond Fibre Company	(8.82)	(2.64)	5.09	24.05	18.93	.....	.....	.....	.....	7.12
Crocker-Wheeler Electric Mfg. Company	(11.43)	(5.46)	3.25	9.41	2.34	2.65	4.56	3.03	2.28	1.22
Cutler, Hammer, Inc	(11.11)	(6.76)	14.46	33.09	22.25	.....	.....	.....	.....	11.06
Electric Household Utilities Corp	(5.03)	(7.39)	16.41	25.62	16.33	2.04	2.61	12.05	14.18	9.91
English Electric Company of Canada, Ltd	.....	1.00	6.88	11.71	8.45	6.82	6.44	0.98	2.23	5.60
Federal Electric Company, Inc	(5.67)	5.07	5.33	4.71	3.64	2.77	2.29	1.73	1.89	2.92
Gamewell Company	2.39	9.94	20.19	16.76	22.88	16.53	23.34	16.00	17.64	14.23
General Cable Corporation	(22.68)	(19.74)	(6.03)	12.76	10.85	4.81	.....	.....	.....	(1.04)
General Electric Company	4.17	10.36	14.93	17.84	16.02	15.15	14.30	12.80	14.05	13.34
Habirshaw Cable & Wire Corporation	.....	.....	(0.40)	8.57	5.71	6.36	9.83	.....	.....	5.91
Kellogg Switchboard & Supply Company	(14.43)	(8.21)	0.50	(8.17)	1.27	0.20	8.97	8.28	10.12	0.87
Line Material Company	(12.61)	5.28	14.77	22.72	45.99	.....	.....	.....	.....	12.46
McGraw Electric Company	(20.41)	6.41	10.12	24.68	.....	.....	.....	.....	.....	10.81
Mallory (P.R.) & Company, Inc	.....	(25.84)	(19.69)	9.37	.....	.....	.....	.....	.....	(7.45)
Manhattan Electrical Supply Co., Inc	.....	.....	.....	8.20	0.47	6.54	13.30	8.28	5.24	5.59
Masonite Corporation	(0.42)	7.37	6.82	19.54	.....	.....	.....	.....	.....	7.98
Minneapolis-Honeywell Regulator Co	3.09	10.07	17.26	03.89	24.71	.....	.....	.....	.....	15.75
Maloney Electric Company	6.41	1.70	24.27	.....	20.51	.....	.....	.....	.....	13.54
New York Shipbuilding Corporation	13.00	6.31	.007	.....	.....	.....	.....	.....	.....	4.99
Okonite Company	.....	.....	.....	.....	11.17	10.62	15.38	12.33	.....	12.13

Sangamo Electric Company	(8.14)	10.99	10.27	16.73	8.40	.....	.....	.....	.....	7.90
Servel, Incorporated	(9.63)	5.29	2.92	(3.18)	2.13	.....	.....	.....	.....	0.63
Square, D. Company	(7.94)	3.26	3.16	19.15	21.08	.....	.....	.....	.....	8.45
Wagner Electric Corporation	(2.15)	3.92	8.86	20.54	14.81	5.39	1.45	2.55	.58	6.94
Westinghouse Elec. & Mfg. Company	(4.56)	(1.72)	5.20	11.76	11.86	9.08	8.30	9.03	9.83	6.31
Weston Electrical Instrument Corp.	(4.27)	3.29	17.62	23.59	17.01	13.69	18.35	20.59	12.45	13.76
Total	(0.89)	4.55	9.59	14.74	13.49	11.71	11.40	10.63	11.28	9.47
Western Electric Company	(7.31)	5.78	8.36	16.40	17.79	(a)19.73	13.43	(b)14.08	9.63	9.54
Western Electric Company, Inc., special income	(7.31)	5.78	8.36	16.40	17.79	31.02	13.43	27.38	9.63	11.45
Western Electric higher than	12	22	17	16	20	18	11	13	8	137
Western Electric lower than	18	10	15	15	9	0	5	3	7	82

(a) Exclusive of Special Income of $9,938,000.
(b) Exclusive of Special Income of $13,487,136.
( ) Denotes loss.

DEFENDANTS' EXHIBIT D-8—Continued

[fol. 3837] (6)

The Chesapeake and Potomac Telephone Company of Baltimore City

Earnings of the American Telephone & Telegraph Company on Its Investment in the Western Electric Company Since 1923

Years	Dividends Paid on Common Stock	Investment in Common Stock by A. T. & T.
1924	$5,000,000	$56,004,379
1925	5,625,000	56,047,523
1926	7,500,000	54,280,512
1927	56,250,000	54,280,512
1928	11,250,000	64,114,224
1929	23,500,000	113,283,171
1930	23,250,000	142,802,106
1931	10,500,000	142,802,106
1932	None	143,294,156
Total	$142,875,000	$826,908,689
Approximate amount of Dividends paid to A. T. & T. (98%)	140,017,500	
Rate of Average Yearly Dividend received on investment by A. T. & T.		16.93%
Rate of Average Yearly Earnings on Common Stock after considering Increase of Common Stock Equity (see below)		17.59%
Common Capital Stock and Surplus—Dec. 31, 1932		$172,708,948
Common Capital Stock and Surplus—Dec. 31, 1923		77,123,767
Increase		$95,585,181
Less Additional Capital Paid in		90,000,000
Increase of Common Stock Equity		$5,585,181

[fol. 1538] DEFENDANTS' EXHIBIT D-9

Working Capital

[fol. 1539] (2)

The Chesapeake and Potomac Telephone Company of Baltimore City

Working Capital

Operating Expenses per books (1932)		$10,537,139.98
Less—		
Donations	$14,204.00	
Depreciation Expense	2,541,773.35	
Pension Note Accruals	105,453.18	
License Contract Payments	192,031.66	
Income, Gross Receipts and Capital Stock Taxes	937,147.78	
	$3,790,609.97	
Plus—		
Cash disbursements charged to Retirement Reserve	369,750.64	
		3,420,859.33
Balance		$7,116,280.65
25/365 of $7,116,280.65		$487,416.00
Plus Average Materials and Supplies (1931-1932)		249,404.00
Working Capital—1932		$736,820.00

Accounting Method

Current Assets	$1,891,642.03
Less: Current Liabilities	1,248,527.88
Working Capital—December 31, 1932	$643,114.15

[fol. 1540] DEFENDANTS' EXHIBIT D-10.

The Chesapeake and Potomac Telephone Company of Baltimore City

Comparison of Suggested Values

	One of Chief Auditor's Suggested Values	Company's Suggested Value	Difference
Physical Property	$40,620,543	$45,890,758	$5,270,215*
Interest during Construction	337,636	2,422,860	2,085,224*
Going Value	782,000	4,500,000	3,768,000
Working Capital	736,820	1,700,000	963,180
Totals	$42,426,999	$54,513,618	$12,086,619
Depreciation	8,380,043	6,368,946	2,011,097
Net Values	$34,046,956	$48,144,672	$14,097,716

* Note:—$1,500,000 of this difference is due to increase in Western Electric prices from January 1, 1930 to December 31, 1932. If this amount be eliminated the difference becomes $3,770,215.

[fol. 1541] DEFENDANTS' EXHIBIT D-11

Revenues, Expenses and Real Income

[fol. 1542] (2)

The Chesapeake and Potomac Telephone Company of Baltimore City

Statement of Revenues and Expenses as Adjusted—Year 1932

Total Operating Revenues—	
Exchange Service Revenues	$10,153,374.16
Toll Service Revenues	2,804,605.63
Miscellaneous Operating Revenues	396,450.19
Total Operating Revenues	$13,354,429.98
Total Operating Expenses—	
Current Maintenance	$1,922,244.08
Depreciation and Amortization	1,167,429.58
Traffic	2,028,897.67
Commercial	1,384,315.12
General and Miscellaneous	609,595.72
License Contract Payments	192,031.66
Uncollectible Operating Revenue	144,000.00
Taxes Assignable to Operations	1,693,459.85
Rent Expense and Deductions	193,125.71
Miscellaneous Deductions from Surplus	2,110.14
Total Operating Expense	$9,337,209.53
Total Net Operating Income	$4,017.220.45
Intrastate Portion (85%)	$3,414,637.38
Intrastate Portion of Net Operating Income after Applying Depreciation Expense Computed by the Commission	$3,061,263.87
Intrastate Partion of Net Operating Income after Applying Depreciation Expense Computed by Mr. Holland	$3,341,434.58

DEFENDANTS' EXHIBIT D-11—Continued

[fol. 1543] (3)

Sheet 2

The Chesapeake and Potomac Telephone Company of Baltimore City

Statement of Revenues as Adjusted—Year 1932

Operating Revenues

Exchange Service Revenues—

500–01	Subscriber's station revenues	$7,384,305.83
–02	Subscriber's station revenues—additional local messages	1,709,503.29
–03	Subscriber's station revenues—service connecting charges	107,900.00
–04	Subscriber's station revenues—restoral of service charge	28.00
–05	Subscriber's station revenues—hand telephone set revenues	77,697.00
–09	Subscriber's station revenues—typewriter exchange switching revenues	55.32
501	Public pay station revenues	774,793.52
503	Service station	10,093.94
504	Private exchange lines:	
–01	" " " —private line telephone service	39,392.24
–02	Private exchange lines—telephone typewriter service	7,669.18
–03	Private exchange lines—other service	24,419.73
505	Minor rents of exchange plant	17,516.11
	Total Exchange Service Revenues	$10,153,374.16

DEFENDANTS' EXHIBIT D-11—Continued

Toll Service Revenues—

510	Message tolls	2,605,217.71
-09	" " —teletypewriter message tolls	3,356.91
512	Leased toll lines	
-01	" " " —private line telephone service	104,547.62
-02	Leased toll lines—short period and other service	13,295.01
514	Telegraph service on toll lines	
-01	" " " " " telephone typewriter service	27,574.96
-02	Telegraph service on toll lines—other service	21,282.05
515	Minor rents of toll plant	29,331.37
	Total Toll Service Revenues	$2,804,605.63

Miscellaneous Operating Revenues—

521	Telegraph commissions	$15,668.02
523	Advertising and directory	309,676.31
524	Rents from other operating property	63,744.95
525	Other miscellaneous revenues	7,360.91
	Total Miscellaneous Operating Revenues	$396,450.19
	Total Operating Revenues	$13,354,429.98

DEFENDANTS' EXHIBIT D-11—Continued

[fol. 1544] (4)

Sheet 3

The Chesapeake and Potomac Telephone Company of Baltimore City

Statement of Expenses as Adjusted—Year 1932

Operating Expenses

Current Maintenance Expense—		
601 R. & M.	Supervision of Maintenance—Ordinary Repairs	$148,116.83
602 R. & M.	Repairs of Aerial Plant—Ordinary Repairs	520,486.67
603 R. & M.	Repairs of Underground Plant—Ordinary Repairs	86,283.56
604 R. & M.	Repairs of Central Office Equipment—Ordinary Repairs	366,290.66
605 R. & M.	Repairs of Station Equipment—Ordinary Repairs	364,789.87
606 R. & M.	Repairs of Buildings and Grounds—Ordinary Repairs	20,782.79
607 R. & M.	Station Removal and Changes	426,129.51
607–78	Station Removal and Changes—Moves charged to Subscribers	(11,370.82)
610	Other Maintenance Expenses	735.01
	Total Current Maintenance Expense	$1,922,244.08
Depreciation and Amortization Expense—		
*608	Depreciation of Plant and Equipment	$1,167,429.58
Traffic Expense—		
621	Traffic Superintendence	$175,481.61
–20	Traffic Superintendence—Transfer to Construction	(17,952.60)

*Balance of Depreciation Expense allowed ($70,154.43) is included in other expense accounts.

DEFENDANTS' EXHIBIT D-11—Continued

622	Service Inspection	38,542.53
623	Operating Clerical Wages	41,605.78
624	Operators' Wages	1,573,741.86
626	Rest and Lunch Rooms	42,836.55
–20	Rest and Lunch Rooms—Lunch Receipts	(45,353.22)
627	Operators' Schooling	3,608.41
628	Transmission Power	82,069.22
629	Central Office Stationery and Printing	19,595.79
631	Miscellaneous Central Office Expenses	99,816.08
632	Pay Station Expenses	8,267.03
633	Other Traffic Expenses	6,638.63
	Total Traffic Expenses	$2,028,897.67

[fol. 1545] (5)

Sheet 4

	Commercial Expenses—	
640–10	General Commercial Administration	$142,822.49
–20	General Commercial Administration—Transfer to Construction	(7,640.17)
–30	Local Commercial Administration	145,313.28
642	Advertising	90,097.58
643	Canvassing	116,922.25
644	Sublicensee Relations	144.28
646	Revenue Accounting	183,288.18
647	Revenue Collecting	257,542.97
648	Pay Station Commissions	186,327.58
649	Directory Expense	269,496.68
	Total Commercial Expenses	$1,384,315.12
	General and Miscellaneous Expenses—	
661	Salaries to General Officers	$130,441.05
662	Salaries to Office Clerks	163,350.84
664	Expenses of Gen. Officers and Clerks	13,980.89

DEFENDANTS' EXHIBIT D-11—Continued

665	Gen. Office Stationery and Printing	13,357.52
666	Other Gen. Office Supplies and Expenses	21,343.09
667	General Law Expenses	25,039.69
668	Insurance Premiums	13,124.80
669	Accidents and Damages	15,236.07
-20	Accidents and Damages—Transfer to Construction	(298.99)
670	Law Expenses Connected with Damages	10,259.23
672-01	Relief Dept. and Pensions—Service Pension	147,763.74
-12	Relief Dept. and Payments and Expenses	875.41
-22	Relief Dept. and Payments and Benefits—Accident	1,132.16
-32	Relief Dept. and Payments and Benefits—Sickness	56,465.19
-42	Relief Dept. Pensions—Death Benefits	8,150.90
-52	Relief Dept. Pensions	5,496.70
-04	Relief Dept. Pensions and Benefits—Active Employees	1,562.99
-05	Relief Dept. Pensions and Benefits—Retired Employees	4,226.99
-06	Relief Dept. Pensions—Department Expenses	3,888.00
-07	Relief Dept. Pensions—Medical Department Expenses	11,768.12
-08	Relief Dept. Pensions—Other Medical Expenses	633.00
-10	Relief Dept. Pensions—Other Expenses	2,178.86
673	Telephone Franchise Requirements	5,777.42
675	Other General Expenses	19,204.35
676	Telephone Franchise Requirements—Cr.	(5,777.42)

DEFENDANTS' EXHIBIT D-11—Continued

690	Gen. Expenses Charged to Construction—Cr.	(59,584.88)
	Total General and Miscellaneous Expenses	$609,595.72
527	License Contract Payments	$192,031.66
304	Uncollectible Operating Revenues	$144,000.00
305	Taxes Assignable to Operations	$1,693,459.85

[fol. 1546] (6)

Sheet 5

Rent Expense and Deductions—

331	Rent Deductions for Tel. Offices	$126,782.26
332	" " —Conduits, Poles, etc.	44,046.32
333	Rent Deductions—Instruments, Equipment	13,463.34
334	Miscellaneous Rent Deductions	8,833.79
	Total Rent Expense and Deductions	$193,125.71

Miscellaneous Expenses Charged to Surplus—

(a)	Adjustment of liability on account of pending accident and accident death cases	$2,500.00
(c)	Payment of Gen. Acct. and Payroll Checks—Surplus	21.10
(d)	Preliminary Expense in connection proposed purchase	5.12
(e)	Transfer of long outstanding checks to Surplus	(416.08)
	Total Miscellaneous Expenses Charged to Surplus	$2,110.14
	Total Operating Expenses	$9,337,209.53

DEFENDANTS' EXHIBIT D-11—Continued

[fol. 1547] (7)

Sheet 6

The Chesapeake and Potomac Telephone Company of Baltimore City

Reconciliation of Operating Revenues per Books and as Adjusted—Year 1932

Operating Revenues per Books		$13,359,711.76
Less:		
Miscellaneous Rent Revenues	$200.00	
Interest Earned	2,722.20	
Interest Charged to Construction	2,193.51	
Miscellaneous non-operating Revenues	166.07	
		5,281.78
Operating Revenues as Adjusted		$13,354,429.98

[fol. 1548] (8)

Sheet 7

The Chesapeake and Potomac Telephone Company of Baltimore City

Reconciliation of Operating Expenses per Books and as Adjusted—Year 1932

Operating Expenses per Books		$10,537,139.98
Plus:		
Income Taxes on Depreciation Reduction		188,972.27
		$10,726,112.25
Less:		
Donations	$ 14,204.00	
*Depreciation Expense	1,374,343.77	
Taxes Applicable to non-Operating Income	354.95	
		1,388,902.72
Operating Expenses as Adjusted		$ 9,337,209.53

DEFENDANTS' EXHIBIT D-11—Continued

*Depreciation and Amortization Expense Charged to Accounts 608 and 340	$ 2,541,773.35
Depreciation Expense Charged to Other Accounts	70,154.43
Total Charged—1932	$ 2,611,927.78
Depreciation Expense Allowed	1,237,584.01
Difference	$ 1,374,343.77

[fol. 1549] (10)

The Chesapeake and Potomac Telephone Company of Baltimore City

Rate Base Established by Statutory Court in Chesapeake and Potomac Telephone Company of Baltimore City v. Ezra B. Whitman et al. (3 F. (2nd) 938), with Yearly Net Increases (Net Increases in Fixed Capital less Net Increases in Reserve for Depreciation with Adjustments for Working Capital Increases and Decreases) Since December 31, 1923

	Amounts	Percentages of Total
Value—December 31, 1923	$29,507,949.00	61.081%
Net Increase—		
1924	3,891,580.69	8.055
1925	3,445,554.94	7.132
1926	2,858,460.98	5.917
1927	2,040,006.84	4.222
1928	1,060,337.95	2.195
1929	1,726,874.90	3.576
1930	2,508,417.66	5.192
1931	1,270,540.00	2.630
1932	(236,290.26)	.....
Totals	$48,073,432.70	100%

Defendants' Exhibit D-11—Continued

[fol. 1550]

(11)

Sheet 2

The Chesapeake and Potomac Telephone Company of Baltimore City

Computation of "Real" Income—1932

Years	Income apportioned to years in accordance with increases in value	U. S. Department of Labor—All Commodities		Federal Reserve Bank of New York		National Industrial Conference Board—Cost of Living		U. S. Bureau of Labor—Cost of Living	
		Translator	Real income	Translator	Real income	Translator	Real income	Translator	Real income
1923	$2,453,758.42	156.7	$3,845,039.44	129.7	$3,182,524.67	136.0	$3,337,111.45	131.1	$3,216,877.29
1924	323,587.11	156.7	507,061.00	129.7	419,692.48	135.2	437,489.77	129.2	418,074.55
1925	286,508.16	165.3	473,597.99	132.8	380,482.84	138.2	395,954.28	133.0	381,055.85
1926	237,698.93	159.7	379,605.19	133.6	317,565.77	138.2	328,499.92	132.6	315,188.78
1927	169,607.05	152.4	258,481.14	133.6	226,595.02	135.3	229,478.34	130.7	221,676.41
1928	88,177.99	154.5	136,234.99	137.5	121,244.74	133.7	117,893.97	129.2	113,925.96
1929	143,655.80	152.2	218,644.13	139.8	200,830.81	133.2	191,349.53	129.3	185,746.95
1930	208,574.09	138.0	287,832.24	131.2	273,649.21	128.1	267,183.41	123.9	258,423.30
1931	105,652.90	116.0	122,557.36	117.2	123,825.20	115.5	122,029.10	112.1	118,436.90
Total	$4,017,220.45		$6,229,053.48		$5,246,410.74		$5,426,989.77		$5,229,405.99
Percent Return	8.36%		12.96%		10.91%		11.29%		10.88%
Excess on a 6% Basis	$1,132,814.54		$3,344,647.52		$2,362,004.78		$2,542,583.81		$2,345,000.03
Excess on a 6% Basis with Depreciation Expense computed by Mr. Holland	$1,046,693.54		$3,211,109.43		$2,249,532.50		$2,426,240.31		$2,232,892.32
Excess on a 6% Basis with Depreciation Expense computed by the Commission	$717,080.95		$2,700,016.15		$1,819,064.96		$1,980,956.27		$1,803,820.01

891

Defendants' Exhibit D-11—Continued

[fol. 1551] (12)

Sheet 3.

The Chesapeake and Potomac Telephone Company of Baltimore City

Value of that Part of Property Valued by Statutory Court as of December 31, 1923, Deemed Still to be in Service as of December 31, 1932, Plus Cost of Additions Since December 31, 1923, of Property Still in Service as of December 31, 1932

	Amounts	Percentages of total
Value—		
1923	$14,034,416.00	26.68%
Additions—		
1924	3,324,946.62	6.32%
1925	4,509,089.69	8.57%
1926	5,073,300.90	9.64%
1927	3,828,206.21	7.28%
1928	3,397,748.86	6.46%
1929	4,304,712.81	8.18%
1930	5,926,838.43	11.26%
1931	4,152,078.52	7.89%
1932	4,063,206.52	7.72%
	$52,614,544.56	100%
Less Depreciation (20.46% of $51,877,724.56)	10,614,182.43	
Rate Base without giving effect to decreased values since 1923	$42,000,362.13	

[fol. 1552]

(13)

Sheet 4

The Chesapeake and Potomac Telephone Company of Baltimore City

Computation of "Real" Income—1932

Years	Income apportioned to years in accordance with allocation of years	U. S. Department of Labor—All Commodities		Federal Reserve Bank of New York		National Industrial Conference Board—Cost of Living		U. S. Bureau of Labor—Cost of Living	
		Translator	Real income	Translator	Real income	Translator	Real income	Translator	Real income
1923	$1,071,794.42	156.7	$1,679,501.86	129.7	$1,390,117.36	136.0	$1,457,640.41	131.1	$1,405,122.48
1924	253,888.33	156.7	397,843.01	129.7	329,293.16	135.2	343,257.03	129.2	328,023.72
1925	344,275.79	165.3	569,087.88	132.8	457,198.25	138.2	475,789.14	133.0	457,886.80
1926	387,260.05	159.7	618,454.30	133.6	517,379.43	138.2	535,193.39	132.6	513,506.83
1927	292,453.65	152.4	445,699.36	133.6	390,718.08	135.3	395,689.79	130.7	382,236.92
1928	259,512.44	154.5	400,946.72	137.5	356,829.61	133.7	346,968.13	129.2	335,290.07
1929	328,608.63	152.2	500,142.33	139.8	459,394.86	133.2	437,706.70	129.3	424,890.96
1930	452,339.02	138.0	624,227.85	131.2	593,468.79	128.1	579,446.28	123.9	560,448.05
1931	316,958.69	116.6	369,573.83	117.2	371,475.58	115.5	366,087.29	112.1	355,310.69
1932	310,129.43	100.	310,129.43	100.	310,129.43	100.	310,129.43	100.	310,129.43
Total	$4,017,220.45		$5,915,606.57		$5,176,004.55		$5,247,907.58		$5,072,845.95
Percent of Return	9.56%		14.08%		12.32%		12.49%		12.08%
Excess on a 6% Basis	$1,497,198.72		$3,395,584.84		$2,655,982.82		$2,727,885.85		$2,552,824.22
Excess on a 6% Basis with Depreciation Expense computed by Mr. Holland	$1,411,077.77		$3,268,766.41		$2,545,019.94		$2,615,381.51		$2,444,072.83
Excess on a 6% Basis with Depreciation Expense computed by the Commission	$1,081,465.18		$2,783,391.39		$2,120,329.21		$2,184,791.14		$2,027,846.27

Defendants' Exhibit D-11—Continued

[fol. 1553] (14)

Sheet 5

The Chesapeake and Potomac Telephone Company of Baltimore City

Value of that Part of Property Valued by Statutory Court as of December 31, 1923, Deemed Still to be in Service as of December 31, 1933, Plus Cost of Additions Since December 31, 1923, of Property Still in Service as of December 31, 1933

	Amounts	Percentages of total
Value—		
1923	$13,537,111.91	25.71%
Additions—		
1924	3,271,486.13	6.21%
1925	4,496,907.27	8.54%
1926	4,836,759.87	9.19%
1927	3,676,559.68	6.98%
1928	3,118,531.76	5.92%
1929	3,815,001.68	7.25%
1930	5,915,997.91	11.24%
1931	4,133,210.19	7.85%
1932	3,315,233.13	6.30%
1933	2,551,144.88	4.81%
	$52,647,234.41	100%
Less Depreciation (22.96% of $51,910,414.41)	11,918,631.15	
Rate Base without giving effect to decrease values since 1923	$40,728,603.26	

DEFENDANTS' EXHIBIT D-11—Continued

[fol. 1554]

(15)

Sheet 6

The Chesapeake and Potomac Telephone Company of Baltimore City

Computation of "Real" Income—1933

Year	Income apportioned to years in accordance with allocation of years	U. S. Department of Labor—All Commodities		Federal Reserve Bank of New York		National Industrial Conference Board—Cost of Living		U. S. Bureau of Labor—Cost of Living	
		Translator	Real income	Translator	Real income	Translator	Real income	Translator	Real income
1923	$837,320.35	138.56	$1,160,191.77	125.76	$1,053,014.70	132.08	$1,105,933.38	128.30	$1,074,282.65
1924	202,246.69	138.56	280,233.01	125.76	254,345.44	131.13	265,570.13	126.41	255,660.04
1925	278,129.91	146.19	406,598.12	128.79	358,203.51	134.28	373,472.84	130.15	361,986.08
1926	299,299.05	141.24	422,729.98	129.55	387,741.92	134.28	401,898.76	129.78	388,430.31
1927	227,323.98	134.75	306,319.06	129.55	294,498.22	131.44	298,794.64	127.93	290,815.57
1928	192,802.00	136.58	263,328.97	133.33	257,062.91	129.88	250,411.24	126.41	243,721.01
1929	236,117.31	134.60	317,813.00	135.61	320,198.68	129.37	305,464.96	126.52	298,735.62
1930	366,063.26	122.03	446,707.00	127.27	465,888.71	124.45	455,565.73	121.22	443,741.88
1931	255,658.06	103.11	263,609.03	113.64	290,529.82	112.16	286,746.08	109.67	280,380.19
1932	205,177.80	91.53	187,799.24	100.00	205,177.80	100.52	206,244.72	99.19	203,515.86
1933	156,651.62	100.00	156,651.62	100.00	156,651.62	100.00	156,651.62	100.00	156,651.62
Total	$3,256,790.53		$4,211,981.70		$4,043,313.33		$4,106,754.10		$3,997,920.83
Percent Return	8.00%		10.34%		9.93%		10.09%		9.82%
Excess on a 6% Basis	$813,074.33		$1,768,265.50		$1,599,597.13		$1,663,037.90		$1,554,204.36
Excess on a 6% Basis with Depreciation Expense computed by Mr. Holland	$726,788.03		$1,656,672.10		$1,492,472.48		$1,554,232.43		$1,448,282.64
Excess on a 6% Basis with Depreciation Expense computed by the Commission	$398,900.07		$1,232,617.07		$1,085,398.79		$1,140,771.63		$1,045,778.96

[fol. 1555] DEFENDANTS' EXHIBIT D-12

Rate of Return

[fol. 1556] (2)

The Chesapeake and Potomac Telephone Company of Baltimore City

Public Utility Bond Issues (Taken from Annalist)

Issued in 1933

	Amount of issue	Yield per cent
Springfield (Mo.) Gas and Electric Company, due June 1, 1957	$414,000	6.11
Providence Gas Company, due February 1, 1963	3,250,000	4.17
Dallas Power and Light Company, due 1952	500,000	5.00
Lake Erie Power and Light Company, due November 1, 1952	475,000	6.35
Suburban Gas and Electric Company, due December 15, 1934	375,000	4.25
Suburban Gas and Electric Company, due December 15, 1934	375,000	4.50
Union Light and Power Company, due May 1, 1957	11,250,000	4.69
Consolidated Gas Electric Light and Power Company of Baltimore, due 1961	5,000,000	4.12
Lowell (Mass.) Gas Light Company, due September 1, 1947	950,000	5.55
Ohio Edison Company, due August 1, 1960	8,000,000	5.25
Washington Gas Light Company, due January 1, 1958	8,500,000	5.42
Issued from July 1 to December 31, 1932		
Connecticut River Power Company, due October 1, 1952	18,000,000	5.50
Detroit Edison Company, due October 1, 1952	15,000,000	5.03

[fol. 1557] (3)

Sheet 2

Eastern Utilities Associates, due October 15, 1935	6,000,000	5.50
Long Island Lighting Company, due September 1, 1955	1,658,000	5.45
Louisiana Steam Generating Corporation, due November 1, 1939	3,200,000	6.90
Mississippi Valley Public Service Company, due December 1, 1954	2,000,000	5.62½
Niagara Falls Power Company, due July 1, 1959	4,500,000	5.02
North Boston Lighting Properties, due October 15, 1937	9,000,000	5.50
Pennsylvania Power Company, due July 1, 1956	678,000	5.14
Rockland Light and Power Company, due May 1, 1958	1,200,000	4.95
Sierra Pacific Power Company, due March 1, 1957	800,000	6.30
Toledo Edison Company, due November 1, 1962	27,500,000	5.30
Union Electric Light and Power Company, due April 1, 1957	7,500,000	5.02
Western Massachusetts Companies, due October 15, 1937	2,500,000	5.05
Boston Elevated Railway Company, due August 1, 1957	5,709,000	6.50
Brooklyn Union Gas Company, due May 1, 1957	10,000,000	5.14
California Oregon Power Company, due May 1, 1942	4,000,000	7.50

[fol. 1558] Sheet 3

Central Illinois Electric and Gas Company, due June 1, 1952	746,000	7.75
Commonwealth Edison Company, due June 1, 1962	18,000,000	6.00
Connecticut Light and Power Company, due July 1, 1962	7,500,000	5.30

DEFENDANTS' EXHIBIT D-12—Continued

	Amount of issue	Yield per cent
Consolidated Gas Company of New York, due July 15, 1957	30,000,000	5.44
Dayton Power and Light Company, due June 1, 1941	8,915,000	5.21
Edison Electric Illuminating Company of Boston, due July 16, 1934	25,000,000	5.20
Iowa Electric Light and Power Company, due August 1, 1942	6,000,000	7.00
Iowa Electric Light and Power Company, due semi-annually from August 1, 1933, to August 1, 1935	2,250,000	6 to 7
Metropolitan Edison Company, due May 1, 1962	4,594,100	5.72
Oklahoma Gas and Electric Company, due March, 1950	1,000,000	6.23
Pennsylvania Electric Company, due April 15, 1962	7,046,000	6.25
Peoples Gas Light and Coke Company, due June 1, 1957	20,000,000	6.24
Public Service of Northern Illinois, due July 1, 1937	20,000,000	6.99
Rochester Gas and Electric Corporation, due March 1, 1962	8,478,000	5.50
San Diego Consolidated Gas and Electric Company, due March, 1960	2,000,000	5.79
[fol. 1559] Sheet 4		
Southern Indiana Gas and Electric Company, due April 1, 1957	$5,500,000	6.00
Union Electric Light and Power Company, due April 1, 1957	15,000,000	5.44
Wisconsin Public Service Corporation, due June 15, 1933	2,500,000	6.52
Wisconsin Valley Electric Company, due June 15, 1933	4,000,000	7.05
Weighted Average Yield	.....	5.61

[fol. 1560] (7)

The Chesapeake and Potomac Telephone Company of Baltimore City

Operating Incomes for the Year 1932 of Certain Corporations Listed on the New York Stock Exchange

Corporations Which Suffered Losses

Allegheny Steel Company
Alpha Portland Cement Company
American Bank Note Company
American-Hawaiian Steamship Company
Allis-Chalmers Manufacturing Company
American Color Type Company
Air-Way Electric Appliance Corporation
Amalgamated Leather Company
American Agriculture Chemical Company
American Beet Sugar Company
American Car and Foundry Company
American Chain Company, Inc.
American Hide and Leather Company

DEFENDANTS' EXHIBIT D-12—Continued

American La France and Foamite Company
American Machine and Metals, Inc.
American News Company, Inc.
American Rolling Mill Company
American Sumatra Tobacco Company
American Type Founders Company
Artloom Corporation
Auburn Automobile Company
American Locomotive Company
American Smelting and Rolling Company
American Steel Foundries
American Woolen Company
Baldwin Locomotive Works
Barnsdall Corporation
Bethlehem Steel Company
Bohn Aluminum and Brass Company
Barker Bros. Corporation
Belding Hemingway Company
Bigelow-Sandford Carpet Company
Blaw-Knox Company
Blumenthal (Sidney) & Co., Inc.
Bucyrus-Erie Company
Bulova Watch Company
Borg-Warner Company
Budd Wheel Company
Caterpillar Tractor Company
Certainteed Products Corporation
Chrysler Corporation
Cluett Peabody and Company, Inc.
Container Corporation of America
Case (J. I.) Company
Century Ribbon Mills
Checker Cab Manufacturing Company
Chickasha Cotton Oil Company
Childs Company
Colorado Fuel and Iron Company
Continental Motors Corporation
Cuban-American Sugar Company
Cutler-Hammer, Inc.
Chicago Pneumatic Tool Company
Colonial Beach Oil Company
Crucible Steel Company of America

DEFENDANTS' EXHIBIT D-12—Continued

Davison Chemical Company
Deere and Company
Eastern Rolling Mill Company
Evans Products Company
Follansbee Bros. Company
Foster Wheeler Corporation
Fairbanks Company
Federal Screw Works
Florsheim Shoe Company
Eaton Manufacturing Company
Federal Mining and Smelting Company
Gabriel Company
General Cable Corporation
General Outdoor Advertising Company
General Refractories Company
General Steel Castings Corporation
Gobel (Adolph), Inc.
Goodrich (B. F.) Company
Goodyear Tire and Rubber Company
Gotham Silk Hosiery Company, Inc.
Guantanamo Sugar Company
Hamilton Watch Company

[fol. 1561] (8)

Sheet 2

Grisby Grunow Company
Gulf States Steel Company
Hupp Motor Car Corporation
International Harvester Company
Harrison-Walker Refractories Company
Houston Oil Company of Texas
Howe Sound Company
International Nickel Company of Canada
Indian Motorcycle Company
Interlake Iron Corporation
International Agricultural Corporation
International Printing Ink Corporation
Intertype Corporation
Kaufman Department Stores
Kayser (Julius) and Company
Ludlum Steel Company

DEFENDANTS' EXHIBIT D-12—Continued

Lane Bryant, Inc.
Lima Locomotive Works, Inc.
Link Belt Company
Liquid-Carbonic Corporation
Jones-Manville Corporation
Jones and Laughlin Steel Corporation
Kelly-Springfield Tire Company
Lehigh Portland Cement Company
Lehigh Valley Coal Corporation
Libby-Owens-Ford Glass Company
Mandel Bros., Inc.
Manhattan Shirt Company
Marlin-Rockwell Corporation
Martin-Perry Corporation
Minneapolis-Moline Power Implement Company
Mohawk Carpet Mills, Inc.
Mullins Manufacturing Company
Munsing Wear, Inc.
National Cash Register Company
National Enameling and Stamping Company
North American Aviation, Inc.
National Acme Company
Mack Trucks, Inc.
Midland Steel Products Company
New York Air Brake Company
Philip Dodge Corporation
Park Utah Consolidated Mines Company
Peerless Motor Car Corporation
Pennsylvania-Dixie Cement Corporation
Otis Steel Company
Pacific Mills
Phillips-Jones Corporation
Pressed Steel Car Company
Remington Rand, Inc.
Savage Arms Corporation
Pittsburgh Coal Company
Republic Steel Corporation
Stewart-Warner Corporation
St. Joseph Lead Company
Sears Roebuck and Company

Servel, Inc.
Shanon Steel Hoop Company
Simms Petroleum Company
Spalding (A. G.) and Bros.
Spear and Company
Superior Steel Corporation
Thompson Products
Timken Roller Bearing Company
Transue and Williams Steel Forging Corp.
United States Leather Company
United States Pipe and Foundry Company
U. S. Steel Corporation
United Piece Dye Works
Virginia-Carolina Chemical Company
Warren Foundry and Pipe Corporation
Westinghouse Electric and Mfg. Company
Wheeling Steel Corporation
Wilcox Oil and Gas Company
Webster Eisenlohr, Inc.
Underwood-Elliott Fisher Company
U. S. Hoffman Mach. Company
United States Rubber Company
Worthington Pump and Mach. Company
Young Spring and Wire Corporation

[fol. 1562] (9)

Sheet 3

Corporations Which Earned Not More than 1% of Plant and Inventories

	Per cent earned
Atlas Powder Company	.26%
Bush Terminal Company	.72
Colgate-Palmolive-Peet Company	.21
Devoe and Reynolds Company, Inc.	.39
Dressler Manufacturing Company	.676
Granite City Steel Company	.21
Phillips Petroleum Company	.48
United Carbon Company	.79
U. S. Industrial Alcohol Company	.51
Wilson and Company	.08

DEFENDANTS' EXHIBIT D-12—Continued

Corporations Which Earned More than 1% but Not More than 2% of Plant and Inventories

	Per cent earned
Durham Hosiery Mills	1.96%
Kelvinator Corporation	1.93
Lea Rubber and Tire Company	1.81
Loft, Inc.	1.17
Pet Milk Company	1.2

Corporations Which Earned More than 2% but Not More than 3% of Plant and Inventories

American Brake Shoe and Foundry Company	2.08%
Briggs and Stratton Corporation	2.77
Columbia Carbon Company	2.54
Maytag Company	2.43
Real Silk Hosiery Mills, Inc	2.4
Radio Corporation of America	2.77
Thompson (John R.) Company	2.07
United States Distributing Corporation	2.08
Vulcan Refining Company	2.06

Corporations Which Earned More than 3% but Not More than 4% of Plant and Inventories

Atlantic Refining Company	3.12%
Cellanese Corporation of America	3.27
Congoleum-Nairn Company	3.89
City Ice and Fuel Company	3.18
Eureka Vacuum Cleaner Company	3.49
Glidden Company	3.2
Mesta Machine Company	3.62
Morrell (John) and Company, Inc.	3.34
National Steel Corporation	3.03
Purity Bakeries Corporation	3.97
Tide Water Associated Oil Company	3.24
Tide Water Oil Company	3.34
U. S. Gypsum Company	3.8
Industrial Rayon Corporation	3.1

DEFENDANTS' EXHIBIT D-12—Continued

[fol. 1563] (10)

Sheet 4

Corporations Which Earned More than 4% but Not More than 5% of Plant and Inventories

	Per cent earned
American Ice Company	4.5%
Allied Chemical and Dye Corporation	4.29
Anchor Cap Corporation	4.35
Cudahy Packing Company	4.5
Gamewell Company	4.93
Hurcules Powder Company	4.05
Mathieson Alkali Works, Inc.	4.36
Ohio Oil Company	4.71
Shattuck (Frank G.) Company	4.16
Union Tank Car Company	4.55
Waldorf System, Inc.	4.56
United Fruit Company	4.97
Ward Baking Corporation	4.81

Corporations Which Earned More than 5% but Not More than 6% of Plant and Inventories

	Per cent earned
American Safety Razor Company	5.87%
Burroughs Adding Machine Company	5.13
International Salt Company	5.6
Minneapolis-Honeywell Regulator Company	5.19
National Tea Company	5.38
Sun Oil Company	5.79

Corporations Which Earned More than 6% but Not More than 7% of Plant and Inventories

	Per cent earned
American Sugar Refining Company	6.47%
Borden Company	6.22
Consolidated Cigar Corporation	6.75
Endicott Johnson Corporation	6.21
General Bronze Corporation	6.53
Loose-Wiles Biscuit Company	6.66
National Lead Company	6.12
Owens-Illinois Glass Company	6.53

DEFENDANTS' EXHIBIT D-12—Continued

Corporations Which Earned More than 7% but Not More than 8% of Plant and Inventories

	Per cent earned
American Can Company	7.05%
Continental Baking Corporation	7.09
Consolidated Laundries Corporation	7.36
Firestone Tire and Rubber Company	7.12
General Printing Ink Corporation	7.68
Kresge (S. S.) Company	7.57
Pillsbury Flour Mills Company	7.9

[fol. 1564] (11)

Sheet 5

Corporations Which Earned More than 8% but Not More than 9% of Plant and Inventories

	Per cent earned
Kroger Grocery and Baking Company	8.71%
McCall Corporation	8.62
Metro-Goldwyn Pictures Corporation	8.81
Procter and Gamble Company	8.28
Western Dairy Products, Inc.	8.29
Wesson Oil and Snowdrift Company	8.83

Corporations Which Earned More than 9% but Not More than 10% of Plant and Inventories

	Per cent earned
Continental Can Company	9.73%
Hanna (M. A.) Company	10.
McKeesport Tin Plate Company	9.36

Corporations Which Earned More than 10% but Not More than 11% of Plant and Inventories

Canada Dry Ginger Ale Company	10.3%
General Cigar Company, Inc.	10.83
Grand Union Company	10.54
Peoples Drug Stores, Inc.	10.75
Universal Leaf Tobacco Company, Inc.	10.86

DEFENDANTS' EXHIBIT D-12—Continued

Corporations Which Earned More than 11% but Not More than 12% of Plant and Inventories

	Per cent earned
General Mills, Inc.	11.04%
P. Lorillard Company	11.03
Penick and Ford, Ltd.	11.64
Sharp and Dohme, Inc.	11.6

Corporations Which Earned More than 12% but Not More than 13% of Plant and Inventories

	Per cent earned
Adams-Millis Corporation	12.23%
Walgreen Company	12.11

Corporations Which Earned More than 13% but Not More than 14% of Plant and Inventories

	Per cent earned
Electric Auto-Lite Company	13.38%
Freeport Texas Company	13.5
Penny, J. C., Company	13.64
Telautograph Corporation	13.44
United Biscuit Company of America	13.95
Air Reduction Company, Inc.	13.0

[fol. 1565] (12)

Sheet 6

Corporations Which Earned More than 14% but Not More than 15% of Plant and Inventories

	Per cent earned
Consolidated Film Industries, Inc.	14.62%
Holland Furnace Company	14.35
Nash Motors Company	14.6
Texas Gulf Sulphur Company	14.32

DEFENDANTS' EXHIBIT D-12—Continued

Corporations Which Earned More than 15% but Not more than 16% of Plant and Inventories

	Per cent earned
General Railway Signal Company	15.28%
International Shoe Company	15.6

Corporations Which Earned More than 16% but Not More than 17% of Plant and Inventories

	Per cent earned
Beech Nut Packing Company	16.58%
Brown Shoe Company, Inc.	16.68
Melville Shoe Corporation	16.5
National Biscuit Company	16.81
New York Shipbuilding Corporation	16.06
Scott Paper Company	16.15

Corporations Which Earned More than 17% but Not More than 18% of Plant and Inventories

	Per cent earned
Diamond Match Company	17.84%
Thacher Manufacturing Company	17.11

Corporations Which Earned More than 19% but Not More than 20% of Plant and Inventories

	Per cent earned
Curtis Publishing Company	19.2%
General Baking Company	19.64
F. W. Woolworth and Company	19.26

Corporations Which Earned More than 20% of Plant and Inventories

	Per cent earned
Affiliated Products Company	32.3%
American Tobacco Company	32.14
American Chicle Company	31.2
American Stores Company	20.25
Bon Ami Company	68.83
Coco Cola Company	65.43

DEFENDANTS' EXHIBIT D-12—Continued

	Per cent earned
Corn Products Refining Company	21.35
Cream of Wheat Corporation	128.3
Gillette Safety Razor Company	26.03
Hershey Chocolate Corporation	32.1
Gold Dust Corporation	23.99
International Business Machines Corporation	37.15
Lehn and Fink Products Company	48.98
Lambert Company	161.75
Lily-Tulip Cup Corporation	22.24
Jewel Tea Company	35.3
Liggett and Myers Tobacco Company	228.59
Norwalk Tire and Rubber Company	28.28

[fol. 1566] (13)

Sheet 7

R. J. Reynolds Company	36.24%
Superheater Company	23.83
Trico Products Corporation	40.33
United States Tobacco Company	30.11
Standards Brands, Inc.	45.53
Wrigley (Wm.) Jr., Company	23.37

Summary

	Number of corporations Number of corporations	Per cent of total Per cent of total
Those which sustained losses	157	53.04
Those which earned not in excess of 1%	10	3.38
Those which earned between 1% and 2%	5	1.69
" " " " 2% " 3%	9	3.05
" " " " 3% " 4%	14	4.73
" " " " 4% " 5%	13	4.39
" " " " 5% " 6%	6	2.03
" " " " 6% " 7%	8	2.7
" " " " 7% " 8%	7	2.36
" " " " 8% " 9%	6	2.04
" " " " 9% " 10%	3	1.01
" " " " 10% " 11%	5	1.69
" " " " 11% " 12%	4	1.35
" " " " 12% " 13%	2	.66
" " " " 13% " 14%	6	2.04
" " " " 14% " 15%	4	1.35
" " " " 15% " 16%	2	.66
" " " " 16% " 17%	6	2.04
" " " " 17% " 18%	2	.66
" " " " 19% " 20%	3	1.01
Those over 20%	24	8.11
Totals	296	100.%

DEFENDANTS' EXHIBIT D-12—Continued

[fol. 1567] (14)

Sheet 8

Railroad Corporations

Those Which Suffered Losses

Gulf, Mobile and Northern Railroad Company.
Norfolk Southern Railroad Company.
Atlantic Coast Line Railroad Company.
Chicago and Eastern Illinois Railway Company.
Chicago, Indianapolis and Louisville Railroad Company.
Chicago, Milwaukee, St. Paul and Pacific Railroad Company.
Delaware and Hudson Railroad Corporation.
Delaware, Lackawanna and Western Railroad Company.
St. Louis Southwestern Railway Company.
Seaboard Air Line Railway Company.
Chicago, Rock Island and Pacific Railway Company.

Railroad Corporations which Earned Less than 1% of Plant and Inventories

	Per cent earned
Central Railroad Company of New Jersey	.57%
Chicago Great Western Railroad Company	.36
Chicago, St. Paul, Minneapolis and Omaha Railway Company	.01
Kansas City Southern Railway Company	.8
Lehigh Valley Railroad Company	.5
Minneapolis, St. Paul and Sault Ste. Marie Railway Company	.11
Nashville, Chattanooga and St. Louis Railway Company	.55
Pere Marquette Railway Company	.37
New York, Ontario and Western Railroad Company	.19
Wabash Railway Company	.32
Southern Railway Company	.72
Western Pacific Railroad Company	.70

DEFENDANTS' EXHIBIT D-12—Continued

Railroad Corporations which Earned More than 1% but Not More than 2% of Plant and Inventories

	Per cent earned
Chicago and Northwestern Railway Company	1.0
Colorado and Southern Railway Company	1.1
Denver and Rio Grande Western Railroad Company	1.38
Great Northern Railroad Company	1.09
Missouri Pacific Railroad Company	1.98
New York Central Railroad Company	1.26
New York, Chicago and St. Louis Railroad Company	1.39
St. Louis-San Francisco Railway Company	1.0
Southern Pacific Company	1.6
Wheeling and Lake Erie Railway Company	1.28

[fol. 1568] (15)

Sheet 9

Railroad Corporations which Earned More than 2% but Not More than 3% of Plant and Inventories

	Per cent Earned
Atchison, Topeka and Santa Fe Railway Company	2.24%
Erie Railroad Company	2.33
Northern Pacific Railway Company	2.03
Texas and Pacific Railway Company	2.27
Western Maryland Railway Company	2.29

Railroad Corporations which Earned More than 3% but Not More than 4% of Plant and Inventories

	Per cent earned
Boston and Maine Railroad Company	3.02
Illinois Central Railroad Company	3.76
New York, New Haven and Hartford Railroad Company	3.46
Pennsylvania Railroad Company	3.57
Reading Company	3.08

DEFENDANTS' EXHIBIT D-12—Continued

Railroad Corporations which Earned More than 4% but Not More than 5% of Plant and Inventories

	Per cent earned
Baltimore and Ohio Railroad Company	4.6
Bangor and Aroostook Railroad Company	4.31
Norfolk and Western Railroad Company	4.58
Union Pacific Railroad Company	4.1

Railroad Corporations which Earned More than 7% of Plant and Inventories

	Per cent earned
Chesapeake and Ohio Railway Company	7.16

Summary of Railroad Corporations

	Number of railroads	Per cent of total
Those which sustained losses	11	22.92
Those which earned less than 1%	12	25.0
Those which earned between 1% and 2%	10	20.83
" " " " 2% " 3%	5	10.42
" " " " 3% " 4%	5	10.42
" " " " 4% " 5%	4	8.33
" " " over 7%	1	2.08
Totals	48	100.%

DEFENDANTS' EXHIBIT D-12—Continued

[fol. 1569]

(17)

Industrial Corporation Profits for the Years 1931 and 1932

Net Profits are Shown After Depreciation, Interest, Taxes, and Other Charges and Reserves, but Before Dividends

Net Worth Includes Book Value of Outstanding Preferred and Common Stock and Surplus Account at Beginning of Each Year

(In Thousands of Dollars)

No.	Industry	Net profits years 1931	Net profits years 1932	Per cent change	Net worth January 1 1931	Net worth January 1 1932	Per cent change	Per cent return 1931	Per cent return 1932
6	Agricultural Implements	D- $1,074	D-$12,267	.....	$180,917	$169,405	- 6.4	....	....
12	Amusements	6,305	D- 11,346	.....	292,923	279,056	- 4.7	2.2	....
23	Apparel	D- 3,346	D- 7,818	.....	155,962	135,766	-12.9	....	....
12	Automobiles	93,757	D- 7,331	.....	1,165,099	1,106,092	- 5.1	8.0	....
30	Auto Accessories	98	D- 10,671	.....	170,370	152,724	-10.4	0.1	....
17	Bakery	38,627	27,160	-29.7	354,745	340,010	- 4.2	10.9	8.0
32	Building Materials	D- 2,875	D- 11,525	.....	377,564	352,915	- 6.5	.....	.....
17	Chemicals	73,188	42,147	-42.4	802,087	774,965	- 3.4	9.1	5.4
10	Coal Mining	9,646	374	-96.1	229,171	226,412	- 1.2	4.2	0.2
13	Confectionery and Bevs	19,339	13,259	-31.4	120,695	122,688	+ 1.7	16.0	10.8
33	Cotton Mills	D- 12,116	D- 9,165	.....	265,099	248,674	- 6.2	....	....
14	Drugs and Sundries	45,547	27,704	-39.2	268,573	278,844	+ 3.8	17.0	9.9
24	Electrical Equipment	D- 2,373	D- 18,148	.....	362,965	344,254	- 5.2	....	....
6	Fertilizer	D- 1,239	D- 4,452	.....	117,840	114,521	- 2.8	....	....
35	Food Products—Misc	44,571	32,217	-27.7	622,785	591,830	- 5.0	7.2	5.4
12	Heating and Plumbing	D- 1,141	D- 1,815	.....	68,589	58,560	-14.6	....	....
16	Household Goods	24,433	8,051	-67.0	178,759	186,655	+ 4.4	13.7	4.3
33	Iron and Steel	3,698	D-127,194	.....	3,659,919	3,543,456	- 3.2	0.1	....
56	Machinery and Tools	D- 1,090	D- 22,158	.....	344,779	321,948	- 6.6	....	....
18	Meat Packing	D- 9,216	D- 2,029	.....	688,027	642,724	- 6.6	....	....

DEFENDANTS' EXHIBIT D-12—Continued

No.	Industry	Net profits years 1931	Net profits years 1932	Per cent change	Net worth January 1 1931	Net worth January 1 1932	Per cent change	Per cent return 1931	Per cent return 1932
25	Mdse.—Chain Stores	85,775	53,507	−37.6	614,642	616,782	+ 0.3	14.0	8.7
14	Mdse.—Dept. Stores	D- 1,430	D- 8,493	.....	153,014	140,565	- 8.1	....	....
3	Mdse.—Mail Order	12,278	D- 2,701	.....	209,597	207,666	- 0.9	5.9	....
18	Mdse.—Wholesale, etc	D- 6,995	D- 5,605	.....	145,482	139,031	- 4.4	....	....
7	Mining, Copper	D- 5,084	D- 7,854	.....	174,276	160,151	- 8.1	....	....
7	Mining, Other Non-ferrous	4,230	1,368	−67.7	323,713	258,285	−20.2	1.3	0.5
6	Office Equipment	D- 713	D- 5,117	.....	100,524	93,566	- 6.9	....	....
7	Paint and Varnish	4,505	1,008	−77.6	98,625	95,347	- 3.3	4.6	1.1
21	Paper and Products	3,148	D- 865	.....	215,402	209,702	- 2.6	1.5	....
23	Petroleum	D- 1,740	12,194	+	729,950	662,872	- 9.2	....	1.8
8	Petroleum Pipe Line	2,605	956	−63.3	41,389	41,189	- 0.5	6.3	2.3
16	Printing and Publishing	14,000	6,466	−53.8	114,813	110,535	- 3.7	12.2	5.8
14	Railway Equipment	D- 11,558	D- 16,591	.....	478,771	436,908	- 8.7	....	....
12	Real Estate	6,937	D- 294	.....	166,289	145,374	-12.6	4.2	....
6	Restaurant Chains	1,021	D- 160	.....	29,014	25,023	-13.8	3.5	....
14	Rubber Tires, etc	D- 816	D- 3,028	.....	419,364	358,301	-14.6	....	....
11	Shoes	13,388	4,715	−64.8	200,598	183,778	- 8.4	6.7	2.6
20	Silk and Hosiery	D- 2,612	D- 3,336	.....	105,765	89,186	-15.7	....	....
8	Sugar—Cuban	D- 9,574	D- 11,041	.....	109,910	93,414	-15.0	....	....
8	Sugar—Other	2,108	4,171	+97.9	82,120	81,607	- 0.6	2.6	5.1
22	Textile Products—Misc	3,945	D- 9,422	.....	225,849	215,379	- 4.6	1.7	....
20	Tobacco	79,469	73,386	- 7.7	546,859	554,539	+ 1.4	14.5	13.2
4	Wool	D- 3,693	D- 8,696	.....	117,283	83,577	-28.7	....	....
79	Miscellaneous—Mfg	34,969	4,086	−88.3	865,919	810,067	- 6.5	4.0	0.5
48	Miscellaneous—Services	10,369	1,004	−90.3	269,218	254,119	- 5.6	3.9	0.4
840	Total	$559,271	D-$15,349	.....	$16,965,252	$16,059,002	- 5.3	3.3	....

D—Deficit.

(Here follows table, side folio 1570)

[fol. 1570]

(18)

Standard Trade and Securities

April 26, 1933. Page 5

Trend of Corporation Earnings, 1927–1932

	No. of Cos.	Net income (Unit: $1,000)						Relatives 1929 = 100					
		1927 $	1928 $	1929 $	1930 $	1931 $	1932 $	1927	1928	1929	1930	1931	1932
Advertising, Ptg. and Pub	16	31,482	35,604	39,291	30,356	17,475	1,967	80	91	100	77	44	5
Agricultural Machinery	4	37,585	46,368	57,578	37,794	384	d18,416	65	81	100	66	1	−32
Aircraft	4	1,159	2,337	1,526	143	d145	d191	76	153	100	9	−10	−13
Apparel	24	22,986	20,928	20,323	4,491	d1,565	d6,621	113	103	100	22	− 8	−33
Automobiles and Trucks	11	315,563	378,181	325,743	158,350	87,835	d37,239	97	116	100	49	27	−11
Auto. Parts and Access	37	27,797	54,710	54,671	14,674	1,367	d15,307	51	100	100	27	3	−28
Auto. Tires	8	32,282	13,614	26,643	d7,549	d2,614	d7,479	121	51	100	−28	− 9	−28
Building	54	91,140	92,744	103,537	52,212	d5,573	d38,561	88	90	100	50	− 5	−37
Chemicals (Industrial)	16	125,111	160,735	191,629	139,381	110,127	60,486	65	84	100	73	57	32
Coal and Coke	12	8,123	7,501	8,515	3,574	d1,493	d4,701	95	88	100	42	−18	−55
Copper and Brass	16	18,530	45,478	58,301	3,580	d10,749	d19,813	32	78	100	6	−18	−34
Cotton and Cotton Goods	16	13,110	6,796	10,690	d7,028	d7,941	d6,362	123	64	100	−66	−74	−60
Electrical Equipment	19	58,131	66,025	84,278	61,165	36,508	6,211	69	78	100	73	43	7
Fertilizers	2	211	340	315	288	89	d32	67	108	100	91	28	−10
Food Products	45	167,443	191,554	219,237	208,157	173,960	120,080	76	87	100	95	79	55
Household Prod. and Supplies	25	34,129	35,525	43,992	24,210	21,836	3,206	78	81	100	55	50	7
Lead and Zinc	5	15,483	17,599	23,086	8,890	3,512	d777	67	76	100	39	15	− 3
Leather and Shoes	14	31,186	28,625	21,418	14,250	9,429	4,305	146	134	100	67	44	20
Machinery and Machine Equip	42	52,950	62,710	80,427	44,791	d5,388	d31,994	66	78	100	56	− 7	−40
Meat Packing	17	13,965	31,222	27,644	22,269	d10,325	d5,240	51	113	100	81	−37	−19
Mining and Smelting	12	49,184	48,608	56,986	28,267	8,765	d5,610	71	85	100	50	15	−10
Misc. Drugs, Medic., Cosmetics	13	22,235	28,182	30,579	27,436	24,393	15,710	73	92	100	90	80	51
Miscellaneous Manufacturing	65	100,223	113,067	131,889	86,467	38,003	10,870	76	86	100	66	29	8
Miscellaneous Services	18	13,485	17,859	24,528	17,796	15,068	7,151	55	73	100	73	61	29
Office and Business Equip	7	21,341	24,474	30,607	21,126	13,047	3,218	70	80	100	69	43	11
Oil Producing and Refining	34	66,313	121,079	162,394	75,279	d35,876	22,126	41	75	100	46	−22	14
Paper and Paper Products	18	13,341	14,494	15,285	6,424	d3,698	d8,568	87	95	100	42	−24	−56
Radio	6	9,595	21,459	17,676	4,361	d1,217	d2,909	54	121	100	25	− 7	−16
Railroad Equipment	13	35,452	27,533	43,573	33,929	68	d8,117	81	63	100	78	0.2	−19
Rayon	4	3,788	5,081	4,508	3,085	1,253	446	84	113	100	68	28	10
Retail Trade	60	203,273	215,968	220,813	152,738	119,279	39,514	92	98	100	69	54	18
Shipping and Shipbuilding	10	7,416	9,077	11,138	3,813	955	d1,355	67	81	100	34	9	−12
Silk and Silk Goods	5	4,449	6,868	4,939	d346	d644	d4,625	90	139	100	− 7	−13	−94
Steel and Iron	36	167,280	213,551	361,732	180,180	d5,083	d145,527	46	59	100	50	− 1	−40
Sugar Producing and Refining	16	14,753	17,487	14,510	7,512	4,072	1,415	102	121	100	52	28	10
Theaters and Motion Pictures	4	8,227	10,761	15,335	17,898	13,616	8,624	54	70	100	117	89	56
Cigarettes and Cigarette Tobacco	5	74,149	76,597	86,269	105,916	111,153	105,990	86	89	100	123	129	123
Cigar Mfrs. and Tob. Growers	14	19,483	20,928	22,489	16,936	13,130	9,376	87	93	100	75	58	42
Wool and Woolen Goods	9	1,007	d1,449	d4,351	d8,345	d3,600	d8,705	....	....	....	....	....	....
Total Industrials	736	1,924,360	2,290,220	2,649,748	1,594,470	729,513	42,555	73	86	100	60	28	2
Utilities—Elec. Lt., Pwr., &c	45	229,630	292,195	339,203	338,303	319,264	258,543	68	86	100	100	94	76
Utilities—Telep. & Teleg	15	208,489	234,226	264,602	254,849	247,384	192,114	79	89	100	96	93	73
Utilities—Trac., Bus & Motor Tr	11	11,285	10,322	11,465	7,659	1,242	d5,595	98	90	100	67	11	−49
Total Utilities	71	449,404	536,743	615,270	600,811	567,890	445,062	73	87	100	98	92	72
Railroads	40	450,106	495,523	588,011	345,798	68,553	d99,829	77	84	100	59	12	−17
Grand Total	847	2,823,870	3,322,486	3,853,029	2,541,079	1,365,956	387,788	73	86	100	66	35	10

Note.—Minus (−) signs indicate the proportionate size of the dollar deficit, as compared with the base year profit. In that group where no relatives are computed, a net deficit was recorded in the base year 1929.

[fol. 1571]

(19)

Net Earnings of 1,067 Corporations by Groups, 1926–32

Industry	No. of Cos.	Net Earnings Available for Dividends (In thousands of dollars) 1932	1931	1930	1929	1928	1927	1926
Agricultural implements	9	*30,177	*9,385	40,164	77,119	61,127	47,989	43,193
Apparel	29	*14,158	*2,175	7,289	21,534	25,675	26,555	24,538
Automobiles	22	*63,382	77,237	164,547	361,646	393,084	331,268	280,471
Excl. General Motors	*21*	**63,547*	**19,622*	*15,448*	*114,328*	*119,525*	*92,004*	*103,772*
Auto accessories	44	*23,536	8,037	37,065	92,897	73,410	43,083	44,766
Building	42	*27,863	6,429	56,405	103,848	90,205	86,604	99,254
Can manufacturing	2	15,776	21,201	31,622	31,693	26,554	17,494	17,470
Cement	6	*7,001	*342	9,475	11,181	13,496	12,020	14,611
†Chemicals	17	49,584	82,208	110,834	154,657	139,856	100,113	94,335
Coal and coke	14	*12,227	*377	5,419	8,691	5,090	*24	14,119
Copper mining	20	*52,888	*7,737	51,804	246,783	161,033	61,921	68,156
Drugs	12	28,649	41,046	46,452	54,491	44,608	40,610	38,027
Electrical equipment	19	1,077	43,947	85,541	118,231	89,920	76,207	81,893
Food—								
Beverages	4	12,090	17,292	19,123	18,142	14,856	12,786	11,377
Biscuits	3	19,335	23,506	27,351	26,933	22,148	19,621	17,769
Bread	9	7,193	13,412	19,049	24,518	22,107	22,047	21,427
Canning	5	*13,670	*10,980	606	11,003	10,929	6,610	9,702
Confectionery	7	13,266	20,449	23,757	23,357	21,040	16,350	17,154
Corn products	4	10,530	11,833	17,332	21,845	15,734	13,590	14,565
Dairy	6	21,557	43,931	53,145	48,591	32,423	22,937	21,866
Meat	16	*2,260	*9,923	34,562	41,175	42,652	20,509	37,520
Other	19	48,740	62,997	78,767	93,799	87,418	82,033	74,980
Furniture and floor coverings	9	*8,127	*1,786	*3,086	13,062	12,379	13,516	9,862

DEFENDANTS' EXHIBIT D-12—Continued

Net Earnings of 1,067 Corporations by Groups, 1926-32

Industry	No. of Cos.	Net Earnings Available for Dividends (In thousands of dollars) 1932	1931	1930	1929	1928	1927	1926
Household products	19	12,727	36,787	49,420	65,248	58,396	62,453	53,498
Leather	8	*6,893	*5,402	*8,695	*8,156	4,111	7,658	1,517
Machinery and tools	69	*35,489	*17,094	48,317	97,886	74,671	61,374	72,395
Metal products—miscellaneous	13	*9,855	1,223	18,745	54,575	38,434	28,437	34,478
Mining—								
Gold	5	8,074	8,311	6,306	7,963	8,315	9,530	8,184
Lead and zinc	14	2,179	7,668	17,614	43,689	33,401	29,060	43,425
Miscellaneous	8	*8,203	4,222	26,587	60,409	43,152	41,085	32,630
Motion pictures	6	*12,108	14,644	31,685	37,920	19,372	11,765	10,741
Office equipment	8	1,309	14,067	25,138	37,898	29,046	25,244	21,648
Paper	36	*23,616	23	17,654	30,443	30,617	29,281	25,095
Petroleum	41	58,472	*48,807	260,233	592,125	523,310	260,402	532,632
Printing and engraving	14	*8,474	3,848	10,875	17,713	14,758	12,022	12,392
Publishing	10	9,744	20,377	30,434	35,078	31,246	26,987	24,672
Radio	6	*2,029	*1,153	979	15,880	27,531	11,497	8,556
Railway equipment	17	*9,717	*1,203	36,608	47,054	31,323	38,764	49,012
Retail—								
Chain	40	77,964	123,625	123,648	144,270	133,997	119,177	102,119
Department	25	*8,476	10,982	23,832	37,331	38,569	41,365	44,198
Mail Order	3	*8,549	3,508	12,474	45,211	46,368	40,153	32,682
Rubber and tires	11	*13,801	*13,082	*20,062	33,451	15,268	52,217	31,503
Shipping and shipbuilding	9	*121	4,606	7,466	13,187	8,907	8,981	6,813
Shoes	7	6,892	13,931	17,124	26,049	25,245	29,076	22,329
Steel	49	*160,228	*13,587	194,429	420,550	256,258	198,894	250,511
Excl. U. S. Steel	*48*	**88,456*	**26,625*	*90,007*	*228,958*	*142,084*	*110,997*	*155,844*

Sugar	13	6,339	3,545	6,481	18,204	25,013	17,585	16,516
Textiles	32	*21,705	*11,658	*13,768	14,216	15,684	22,795	4,672
Tobacco—								
Cigarettes	6	105,988	111,162	105,927	86,329	76,676	74,271	70,907
Cigars	10	4,874	5,101	8,332	17,327	16,322	15,151	12,442
Snuff	3	7,371	7,085	7,176	7,206	7,140	6,809	6,292
Other	6	215	2,172	1,517	7,852	11,303	12,068	14,557
Total Industrial	806	*54,608	715,722	1,963,799	3,612,110	3,050,177	2,367,938	2,603,471
Railroads	165	*153,308	134,762	523,907	896,807	786,824	672,900	809,054
Utilities—								
Electric, gas**	71	346,852	418,270	427,455	418,256	369,196	316,761	276,378
Telephone††	25	139,336	193,379	201,646	217,105	191,088	166,059	155,061
All Companies	1,067	278,272	1,462,133	3,116,807	5,144,278	4,397,285	3,523,658	3,843,964

* Deficit. † Partly estimated. ‡ Earnings for the chemical group do not include dividends received by Du Pont from General Motors. ††Bell System earnings. **The light, power and gas companies consist mainly of operating companies; a few companies which might be described as "holding and operating companies" are also included, but in no cases are there duplications between earnings of holding companies and their subsidiary operating companies.

Defendants' Exhibit D-12—Continued

[fol. 1572]

(20)

The Chesapeake and Potomac Telephone Company of Baltimore City

Income Produced, by Industrial Divisions

	Millions of dollars				Percentages of 1929			
	1929	1930	1931	1932	1929	1930	1931	1932
Agriculture	7,538	5,623	3,878	2,233	100.0	74.6	51.4	29.6
Mining	1,877	1,348	734	443	100.0	71.8	39.1	23.6
Electric Light and Power and Gas	1,289	1,225	1,178	958	100.0	95.0	91.4	74.3
Manufacturing	19,361	14,299	9,678	4,991	100.0	73.9	50.0	25.8
Construction	3,082	2,652	1,672	774	100.0	86.1	54.2	25.1
Transportation	7,017	6,079	4,863	3,585	100.0	86.6	69.3	51.1
Communication	1,024	994	906	749	100.0	97.1	88.5	73.2
Trade	11,367	9,519	7,379	4,792	100.0	83.7	64.9	42.2
Finance	9,370	8,436	6,426	4,517	100.0	90.0	68.6	48.2
Government	6,459	6,764	6,793	6,794	100.0	104.7	105.2	105.2
Service	8,686	8,102	6,778	5,258	100.0	93.3	78.0	60.5
Miscellaneous	5,967	5,443	4,365	3,255	100.0	91.2	73.2	54.6
Total	83,037	70,484	54,652	38,349	100.0	84.9	65.8	46.2

Note—The United States Department of Commerce, with the cooperation of the National Bureau of Economic Research, Inc., made a study of national income in response to Senate Resolution No. 220, Seventy-Second Congress, and filed a report of that study with the Senate in 1934. The figures in this exhibit were taken from Bulletin 49 of the National Bureau of Economic Research, Inc., which Bulletin gave a summary of the study mentioned above.

Defendants' Exhibit D-12—Continued

[fol. 1573] (22)

The Chesapeake and Potomac Telephone Company of Baltimore City

Market Value of Stocks Listed on New York Stock Exchange (in Millions of Dollars) at End of Year

	1932	1931	1930	1929	1928
Common	$19,252	$22,189	$41,805	$56,972	$59,803
Preferred	3,821	4,505	7,214	7,736	7,675
Total	$23,073	$26,694	$49,019	$64,708	$67,478

Note—Above compilation taken from Moody's Manual of Industrials for 1933.

The Chesapeake and Potomac Telephone Company of Baltimore City

Per Cent Return on Plant and Equipment of Telephone Companies Associated with the American Telephone and Telegraph Company for Year 1932

	#1 Plant and equipment— Dec. 31, 1932	#2 Depreciation reserve Dec. 31, 1932	#3 Plant and equipment less reserve Dec. 31, 1932	#4 Operating income 1932	#5 Per cent return on #1	#6 Per cent return on #3
New England Telephone and Telegraph Co.	$307,996,557	$60,590,558	$247,405,999	$14,630,266	4.75	5.91
Southern New [illegible] Telephone and Telegraph Company	77,462,126	13,936,015	63,526,111	3,672,971	4.74	5.78
New York Telephone Company	771,394,516	185,715,063	585,679,453	34,588,400	4.48	5.91
New Jersey Bell Telephone Company	195,227,561	35,256,411	159,971,150	8,556,517	4.38	5.35
Bell Telephone Company of Pennsylvania	313,148,628	51,349,318	261,799,310	13,531,274	4.32	5.17
Diamond State Telephone Company	8,042,825	1,130,215	6,912,610	473,147	5.88	6.84
Chesapeake & Potomac Telephone Co. (N. Y.)	34,557,338	6,699,702	27,857,636	1,955,875	5.66	7.02
Chesapeake & Potomac Telephone Co. of Virginia	31,278,745	4,586,500	26,692,245	1,763,753	5.64	6.61
Chesapeake & Potomac Telephone Company of West Virginia	24,839,264	3,075,599	21,763,665	636,127	2.56	2.92
Southern Bell Telephone & Telegraph Company	229,466,251	39,082,780	190,383,471	10,693,755	4.66	5.62
Ohio Bell Telephone Company	171,376,200	21,298,644	150,079,556	7,353,991	4.29	4.9
Cincinnati and Suburban Bell Telephone Co.	39,425,984	9,648,037	29,777,947	2,441,842	6.19	8.2
Michigan Bell Telephone Company	174,783,856	22,744,975	152,038,881	4,513,248	2.58	2.97
Indiana Bell Telephone Company	46,851,734	4,615,786	42,235,948	2,295,713	4.90	5.44
Wisconsin Telephone Company	78,144,705	18,130,087	60,014,618	1,899,664	2.43	3.17
Illinois Bell Telephone Company	292,794,883	77,094,336	215,700,547	11,709,094	4.00	5.43
Northwestern Bell Telephone Company	131,116,962	30,913,712	100,203,250	6,161,719	4.70	6.15
Southwestern Bell Telephone Company	325,185,649	57,397,707	267,787,942	15,202,174	4.67	5.68
Mountain States Telephone and Telegraph Co.	93,373,023	23,780,239	69,592,784	3,510,956	3.76	5.05
Pacific Telephone & Telegraph Company	428,599,712	78,605,324	349,994,388	21,091,229	4.92	6.03
Chesapeake and Potomac Telephone Company of Baltimore City	49,991,946	10,229,981	39,761,965	2,833,237	5.67	7.13
Totals	$3,825,058,465	$755,880,989	$3,069,179,476	$169,514,952	4.43	5.52

Note—Working capital is not included in plant and equipment. No allowance is made for going value except amount included in plant and equipment.

DEFENDANTS' EXHIBIT D-12—Continued

[fol. 1575] (26)

The Chesapeake and Potomac Telephone Company of Baltimore City,

Savings Bank (Baltimore, Maryland) Interest Rates

Years	Rates
1923	4 %
1924	4½%
1925	4 %
1926	4½%
1927	4½%
1928	4½%
1929	4½%
1930	4½%
1931	4 %
1932	3½%
1933	3 %

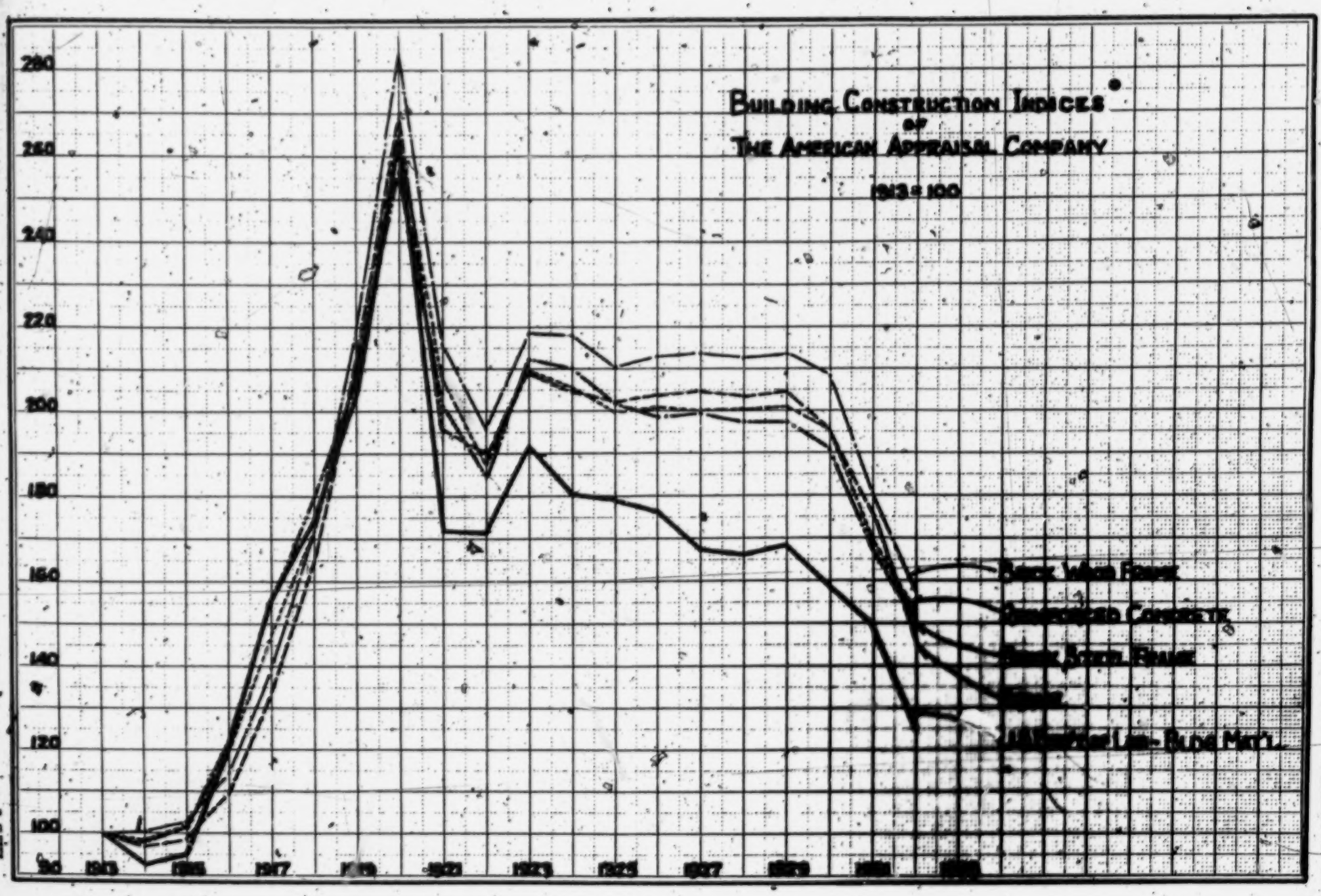
[fol. 1576] (27)

The Chesapeake and Potomac Telephone Company of Baltimore City

Comparison of Cost of Money in 1929 with Cost in December, 1933. (Taken from Reports of Federal Reserve Board and Federal Reserve Bulletin)

	Per Cent 1929	Per Cent December, 1933
Federal Reserve Bank (New York)—		
Rates on Rediscounts, etc.	4½% to 6	2%
New York Open-Market Rates—		
Prime Commercial Paper	5¼ to 6¼	1¼ to 1½
Prime Bankers Acceptances (90 days)	3¾ to 5½	⅝
Time Loans (90 days)	4¾ to 9	¾ to 1¼
Call Loans	4.88 to 9.8	0.94
Treasury Bonds	3.46 to 3.76	3.62
United States Treasury Notes and Certificates, 3 to 6 Months	3.05 to 5.09	0.29

(Here follows photolithograph, side folio 1577)



DEFENDANTS' EXHIBIT D-13

[fol. 1578] DEFENDANT'S EXHIBIT D-14

The Chesapeake and Potomac Telephone Company of Baltimore City

Company's Estimate of Revenues and Expenses for 1934 After Adjustments to Depreciation Expense and Income Tax Expense

	With depreciation expense computed on "cost" by commission	With depreciation expense computed on "value" by commission
Total Operating Revenues—		
Local service revenues	$9,625,000.00	$9,625,000.00
Toll service revenues	2,672,000.00	2,672,000.00
Miscellaneous revenues	403,000.00	403,000.00
Other telephone revenues	250.00	250.00
Total operating revenues	$12,700,250.00	$12,700,250.00
Total Operating Expenses—		
Current maintenance	$2,208,000.00	$2,208,000.00
Depreciation	1,720,724.00	1,352,284.00
Traffic	1,865,000.00	1,865,000.00
Commercial	1,081,000.00	1,081,000.00
General office salaries and expenses	545,000.00	545,000.00
Operating rents	174,000.00	174,000.00
Relief and pensions	213,000.00	213,000.00
General services and licenses	181,000.00	181,000.00
Miscellaneous operating expenses	15,000.00	15,000.00
Uncollectible operating revenues	88,000.00	88,000.00
Operating taxes	1,620,433.00	1,671,093.00
Amortization of rate case expense	30,000.00	30,000.00
Total operating expenses	$9,741,157.00	$9,423,377.00
Total net operating income	$2,959,093.00	$3,276,873.00
Operating income after giving effect to depreciation expense based upon cost, as computed by:		
Mr. Holland	$3,283,014.00	
Mr. Pagon	$3,369,300.00	

[fols. 1579 & 1580]

The Chesapeake and Potomac Telephone Company of Baltimore City

Reconciliation of Operating Income for 1934 as Estimated by Company with Estimate After Applying Commission's Depreciation Rates

	On "cost" basis	On "value" basis
Operating income per company estimate	$2,569,005.00	$2,569,005.00
Plus depreciation adjustment	452,276.00	820,716.00
	$3,021,281.00	$3,389,721.00
Less income tax adjustment	62,188.00	112,848.00
Adjusted operating income	$2,959,093.00	$3,276,873.00

DEFENDANTS' EXHIBIT D-15

PUBLIC SERVICE COMMISSION
OF MARYLAND

In the Matter of
The Chesapeake and Potomac Telephone
Company of Baltimore City

INVESTIGATION OF THE RATES AND
CHARGES, PROPERTY AND AFFAIRS
Case No. 690

Before
The Public Service Commission
of Maryland

[illegible], 1918

PUBLIC SERVICE COMMISSION
OF MARYLAND

IN THE MATTER OF THE CHESAPEAKE & POTOMAC TELEPHONE COMPANY OF BALTIMORE CITY. INVESTIGATION OF THE RATES AND CHARGES, PROPERTY AND AFFAIRS.	BEFORE THE PUBLIC SERVICE COMMISSION OF MARYLAND. CASE NO. 690.

APPEARANCES:

Osborne L. Yellott, People's Counsel,
H. Findlay French and Ogle Marbury, Counsel for the Protective Telephone Association of Baltimore City,
Robert V. Marye and Bernard Carter & Sons, Counsel for the Chesapeake and Potomac Telephone Company of Baltimore City.

CONCLUSIONS.

Our conclusions in this case are as follows:

1. That the fair value for rate-making purposes of the property of the Chesapeake and Potomac Telephone Company of Baltimore City in this State, was Eleven Million, Five Hundred and Fifty-four Thousand, Seven Hundred and Fifty-eight Dollars ($11,554,758) on June 30, 1914, the date of the inquiry in this investigation.

2. That the net income from operations for distribution during the year ending June 30, 1914, was Six Hundred and Seventy-three Thousand, Two Hundred and Forty Dollars ($673,240), the same being at the rate of Five and Eighty-two one hundredths per cent (5.82%) upon the investment aforesaid, or at the rate of approximately six per cent (6%) upon the average investment for the year ending on such date;

3. That the maximum return which the respondent company should be permitted to earn upon its property used in the public service in this State is eight per cent (8%);

4. That the earnings of the said company under its existing schedules of rates, taken as a whole, are not excessive; and a general reduction of said rates would therefore not be reasonable; nevertheless the earnings of said company are such as to justify the passage of any order or orders which this Commission may hereafter deem reasonably necessary to correct any of such rates which may be found upon further consideration to subject any particular person or locality to any unfair prejudice or disadvantage.

The reasons for these conclusions will be found in the following Opinion:

OPINION.

Towers, Chairman. Filed March 8th, 1916.

HISTORY OF INVESTIGATION.

On August 18th, 1910, the Chesapeake & Potomac Telephone Company of Baltimore City filed with this Commission its proposed tables of telephone rates for Baltimore City embodying material changes in the rates previously charged by it for telephone service. Thereupon the engineering and accounting departments of the Commission were directed to gather data as to the property and accounts of the company in so far as the same might concern the propriety of the rates proposed to be charged in Baltimore City. As the first step in the investigation the telephone company was required to furnish a detailed list of all its property, with an itemized statement of the values thereof. This statement was closely scrutinized by the Auditor of the Commission who reported in due course that the same was substantially correct. The Chief Engineer of the Commission reported that after going over all the inventories and checking every item, he found the book values stated by the company so reasonable and moderate that, in his judgment, nothing could be gained by a

physical valuation. He suggested, however, that because of the importance of the inquiry, it was desirable to have all the data he had collected, together with his conclusions and recommendations, reviewed by a recognized authority in such matters. Accordingly the Commission employed for this purpose Mr. Dugald C. Jackson, of Boston, a prominent consulting electrical engineer, thoroughly familiar and experienced in the valuation of telephone property. Mr. Jackson made the Commission a full report in which he approved the conclusions of the Commission's Chief Engineer. In this investigation all valuations were made as of September 30th, 1910, the Company's book values being $5,667,642.10 and the Chief Engineer's estimate of the value of the property of the company in use in Baltimore City on that date being $5,665,729.74, the discrepancy between the two sets of figures being due to a relatively slight difference in the calculation of existing depreciation. The investigations of the Auditor of the Commission showed that the net operating revenues of the company from its business in Baltimore City during the year ending June 30th, 1910, were $861,589.73, from which the Commission deducted certain charges for rentals, taxes and depreciation aggregating $461,419.99, leaving the net income of the company $400,169.74, this sum being a trifle over seven per cent upon the amount of the investment as shown by the books of the company.

Upon this state of facts the Commission on December 30, 1911, filed its opinion through the Honorable James M. Ambler, then Chairman of the Commission, and at present a member of the Supreme Bench of Baltimore City, holding that in general the rates proposed to be charged by the company were reasonable and fair, this opinion being followed by an order of the Commission passed January 2, 1912, substantially approving and authorizing the schedules of rates proposed by the company as above set forth. Subsequent orders of the Commission were passed from time to time postponing the date upon which the original order was to take effect with respect to certain specific rates referred to therein.

The rates so finally established are substantially the rates now in force in Baltimore City.

The rates established by the Commission's order of January 2, 1912, and the several supplemental orders above referred to, were not satisfactory to a number of the company's patrons in Baltimore City, with the result that a large number of these formed an organization known as "The Protective Telephone Association of Baltimore City." This association immediately set about to secure a revision of the rates prescribed by the order of January 2, 1912 and on January 6, 1913, filed a petition requesting the assignment of People's Counsel to assist counsel for that association, this being accordingly done with the approval of the Governor.

On March 31st, 1913, said association filed with the Commission a formal "Petition and Complaint" regarding telephone rates and service by the Chesapeake & Potomac Telephone Company of Baltimore City and its associated companies in which the Commission's order of January 2, 1912, was vigorously attacked.

The prayer of the petition was that the Assistant General Counsel to the Commission, generally referred to as People's Counsel, be directed to take such action as in his judgment, acting with the consent of the Commission, should seem to be best for the purposes:

> "First, of making a valuation for rate-making purposes of the property of the respondent Telephone Company and its allied companies in the City of Baltimore, or, if he and the Commission should think best, in the whole State of Maryland combined.
>
> "Second, of making an expert examination into the books and accounts of the said Telephone Company for the purpose of ascertaining in detail what are the gross and net earnings, the proper operating expenses, the cost of construction and the actual depreciation and maintenance charges of the said Companies.

"Third, of making, determining and establishing for the City of Baltimore or the State of Maryland, as a whole, based upon the facts set out in this petition and upon such additional data and information as may be obtained hereafter, such schedule or schedules of maximum telephone rates and service as may be fair, just, and equitable."

This petition was directed against the Chesapeake & Potomac Telephone Company of Baltimore City, the Chesapeake & Potomac Telephone Company (of New York), The American Telephone and Telegraph Company of Baltimore City and the American Telephone and Telegraph Company (of New York). In due course answers to the above petition were filed by all these companies in which explicit denials were made of all the more important allegations contained in the petition of the Protective Telephone Association above referred to. No hearing was had upon the petition of the Protective Telephone Association, but realizing that there was substantially intrinsic merit in the objections of the Protective Telephone Association to the Commission's order of January 2, 1912, as a final determination of questions of great moment to the public of Baltimore City in that, first, it had not been based upon a physical valuation of the respondent company's property and a close analysis of their books, and in that, second the public had not been adequately represented by counsel at the hearing preliminary to the passage of such order; and further realizing that the public could not reasonably be expected long to be satisfied with an order passed under such circumstances, no matter how valid and reasonable it might in fact be, this Commission determined to conduct a reinvestigation of the company's property and affairs in this State which would be open to none of the objections made to the order of January 2, 1912, but which should be based upon a physical valuation of the company's property and conducted on behalf of the public by the Assistant General Counsel to the Commission.

Consequently on December 1, 1913, an order for such investigation was passed, as follows:

"The above cause having come to be heard upon the Petition of the Protective Telephone Association of Baltimore City, et al. the answers of the several respondents, and the other proceedings in the cause, and being submitted, and it appearing to the Commission that a thorough and complete investigation of the property and affairs of the respondents should be made for the purpose of ascertaining whether or not the respondent, the Chesapeake and Potomac Telephone Company of Baltimore City is receiving a fair, just and reasonable return under its rates for service now in force in this State, and whether such service is just, reasonable, reasonably proper and adequate, and if such rates be found to be unfair, unjust and unreasonable that new rates for such service be established by the Commission to become effective at such time or times as the Commission may by its order determine, and if such service is found to be unjust, unreasonable, unreasonably improper or inadequate the Commission shall determine the just, reasonable, reasonably adequate and proper regulations and service to be in force in this State.

"It is, therefore, this 1st day of December, 1913, by the Public Service Commission of Maryland,

"ORDERED: That this Commission do forthwith proceed to make an investigation of the property and affairs of the respondents in the State of Maryland for the purpose of ascertaining whether the rates now being charged and received by this respondent, The Chesapeake and Potomac Telephone Company of Baltimore City, provide a fair, just and reasonable return for the service now being rendered by said respondent in this State, and whether said service is just, reasonable, reasonably proper and adequate, and if the Commission determine that the rates provide more than a fair, just and reasonable return, it do then proceed to establish upon the information obtained in such investigation such rates to be here-

after charged for service by the respondent, The Chesapeake and Potomac Telephone Company of Baltimore City, as may be fair, just and reasonable to the public and to said respondent, and to determine upon such information the just, reasonable, reasonably adequate and proper regulations and service to be in force in this State;

"And it is further ordered that such investigation be conducted for and on behalf of this Commission by its Assistant General Counsel, who shall proceed forthwith to cause to be made and returned to this Commission a valuation or valuations for rate-making purposes of the property of the respondent companies in the whole State of Maryland, for the purpose of ascertaining the cost and value of all kinds of property of said respondents devoted to the service of the public, and an examination into the books, records and accounts of said respondent companies for the purpose of ascertaining in detail what are the gross and net earnings, the proper operating and other expenses, including the depreciation and maintenance charges, and such other matters and things as may be necessary for a proper determination of the questions involved in such investigation;

"And it is further Ordered that the Secretary of this Commission do forthwith docket a new case to be entitled 'In the matter of The Chesapeake and Potomac Telephone Company of Baltimore City, Investigation of the Rates and Charges, Property and Affairs,' wherein shall be filed a copy of the report of the Assistant General Counsel to the Commission filed October 20th, 1913, in cases Nos. 38 and 569, a copy of the answer of the respondents thereto, a copy of this Order, and such other papers and data as may from time to time hereafter be filed as a part of the proceedings therein;

"And it is hereby further ordered and ruled that in determining the matters hereinbefore ordered and directed

to be investigated, no part of the proceedings in the Cases Nos. 38 and 569, or any data or information contained therein, shall be considered as a part of the record in this proceeding."

PLAN OF INVESTIGATION.

As will be seen by reference to the Commission's order of December 1, 1913, the entire presentation of the people's case in connection with the investigation so ordered was left to the Assistant General Counsel to the Public Service Commission, he having been connected with the case since his appointment and qualification in February, 1913.

On October 8, 1913, the Assistant General Counsel filed with the Commission a paper designated as his "First Preliminary Report and Recommendations" in which he set forth at some length his recommendations as to the proper conduct of any re-investigation of the property and affairs of the Chesapeake and Potomac Telephone Company of Baltimore City which the Commission might determine to undertake.

In this report he urged the co-operation of the respondent company in a business-like investigation as contra-distinguished from the ordinary rate investigation contested along partisan lines by the representatives of the public on the one hand and of the utility on the other.

Printed copies of this report of the Assistant General Counsel were furnished the representatives of the telephone company, with the result that almost immediately they came before the Commission and stated that while they were originally opposed to a re-investigation of their property and affairs so soon after the original investigation on the ground that it would be a needless expense both to the public and to the company itself, nevertheless they would welcome an investigation conducted along the lines suggested by the Assistant General Counsel, since they felt that an investigation so conducted would set at rest for many years to come all questions of controversy between the public and themselves as to their actual

property and earnings in this State and thus leave them uninterrupted in carrying out their chief duty of furnishing the people of the State of Maryland adequate and satisfactory service at a reasonable profit to the company itself.

To this end, counsel for the respondent company pledged its entire co-operation in bringing about an investigation such as that outlined by the Assistant General Counsel. It is most gratifying for us to be able to say that this co-operation has done much to lighten what would otherwise have been a most onerous task to the Commission. It has also resulted in a great saving of cost both to the company and to the State.

In the same report People's Counsel outlined broadly his plan for the presentation to the Commission of the evidence bearing upon the value of the company's property and the amount of its earnings under the existing rates. This plan was subsequently followed almost to the letter. The inventory and all detail and summary form sheets based thereon were arranged in the order of accounts set forth in the accounting system prescribed by the Interstate Commerce Commission for use by telephone companies. An exhaustive check of the company's inventory was made by the Commission's engineers and such inventory found to be substantially correct. A list of over one thousand units of property found in a telephone plant was prepared from this inventory, and instructions given defining units as to the nature of which there might be doubt. Back of the unit cost sheets was a series of unit cost detail sheets upon which the cost of each unit was subdivided into the items, material, labor, incidentals, supply department costs, supervision, superintendence and plant accounting, the item of material being further subdivided into major items, sub-items, exempt and freight and cartage, all these terms being defined for the use of the appraisers and the Commission. Extreme care was taken to see that the estimates of the company's and Commission's engineers were made independently. As a consequence, by the use of the standard classification of accounts, and the definitions accompanying

the unit cost sheets, it was made possible to transfer the figures of the two sets of engineers to summary sheets embracing entire accounts and arranged with parallel columns for the insertion of both sets of figures.

As a result of this method of presentation of the great mass of data involved in the investigation, when the independent appraisals were brought together, counsel for the Commission and the company were able almost at a glance to ascertain precisely wherein the several engineers differed in their valuations. Starting with an initial difference of less than seven per cent in the respective valuations of physical property aggregating over seven million dollars, their finger went back unerringly through summary sheet after summary sheet until it finally pointed to differences in some of the unit cost detail sheets, which differences, although relatively small in themselves, became of great magnitude when multiplied by thousands of units. In one case the difference was found to be in the respective estimates of the cost of material, in another, of labor. In some instances the differences were found to be due entirely to clerical errors or inadvertent oversight upon the part of the engineers. These were immediately corrected. The remaining differences were then referred to the engineers with instructions to eliminate them as far as they could by mutual agreement. This cut out many more and left three points which the engineers reported to counsel for the respective parties as involving legal rather than engineering problems. Counsel had no difficulty at all in agreeing that two of these questions should be decided against the company and one in its favor. This agreement of counsel eliminated the last remaining difference, and the entire valuation of the directly distributed costs of the company's physical property was thereupon reported to the Commission as a matter of agreement, with a full explanation of how such agreement had been reached. The Commission called for a full explanation of all concessions which had been made by its engineers and counsel, and when this explanation had been made to its entire satisfaction, speedily reached the conclusion that the figure finally

reached in this series of conferences fairly represented the values which it purported to represent.

These agreements, as will be seen, related solely to the value of the tangible, physical property—what was referred to as the "directly distributed costs," representing the actual cost of the material and labor going directly into the actual, tangible, physical property of the company. It did not cover what were referred to in this case as "construction overheads" or the many non-physical values claimed by the company.

The Commission felt that the valuation of the tangible, physical property of the company was almost purely an engineering problem, and that if its engineers and the company's engineers could agree upon the same, the rights of the public would be amply protected, especially when the several values agreed upon were checked up by reference to other data in the possession of the Commission and found to be conservative.

The Commission did not, however, feel that construction overhead and intangible valuations were wholly engineering questions, and for this reason decided to determine all such questions for itself. But even in this, the Commission was greatly aided by the same spirit of mutual co-operation between its counsel and engineers and counsel and engineers for the company. Throughout all the hearings, which consumed many weeks, and the record of which fills over 3200 type-written pages, there was a noteworthy absence of bickering upon the part of contending counsel and of differences over non-essentials on the part of the engineers and other witnesses. All concerned seemed to realize that they were taking part in a serious and purely business undertaking, the object of which was to determine once and for all the fair present value of the company's property in the State of Maryland for rate-making purposes.

Incidentally, in the presentation of the evidence to the Commission there was prepared a series of forms designed to contain all necessary data relative to the company's earnings and expenses in this State.

All this multitude of forms was finally brought together by successive summary sheets and narrowed down to a few lines on a single sheet with space for the insertion by the Commission of the following data at the conclusion of the investigation:

(1) Fair present value for rate-making purposes as of June 30th, 1914, as determined by the Commission;

(2) Net income for distribution, i. e., present return, and rate thereof under existing rates, as determined by the Commission;

(3) Proper rate of return, and amount of return thereunder upon present fair value as determined by the Commission;

(4) Extent to which present return excessive or inadequate.

THE VALUATION.

General Principles.

The ultimate object of an investigation of the property and affairs of a public utility for rate-making purposes is to ascertain and establish by the authority of the State rates for adequate service which shall be fair both to the public and to the utility which is the subject of investigation.

Therefore it is seen that we must bear in mind at all times and in every phase of the investigation these three things:

First, *adequate service* to the public;

Second, *charges* for that adequate service which will be *fair to the public*; and

Third, *charges* which will be *fair to the utility* furnishing such service.

Within these bounds we know of no constitutional limitations upon the power of the State to establish the rates to be charged by the utilities subject to its jurisdiction, and it is only when the State or its administrative body transcends these bounds that its conclusions are properly reviewable by the Courts.

The question of adequate service, the fair value of the property used in the service, and the fairness of the return both in so far as it concerns the public and the utility, are all so intimately blended and related one to the other that it is impossible properly to consider any one of them without giving the others at the same time due consideration.

And it is for these reasons that it has been held up by our highest courts that the ascertainment of the fair value of the property of a utility used in the public service is not to be controlled by artificial rules, and is not a matter of formulas, but must be arrived at by a reasonable judgment having as its basis a proper consideration of all relevant facts. These conclusions have been enunciated by our highest courts on many occasions, but for our purposes it will be necessary to quote from but two of these decisions.

In the leading case of *Smyth vs. Ames*, 169 U. S. 466, decided in 1898, Mr. Justice Harlan of the Supreme Court of the United States, said, in part:

> "By the Fourteenth Amendment it is provided that no State shall deprive any person of property without due process of law, nor deny to any person within its jurisdiction the equal protection of the laws. That corporations are persons within the meaning of this Amendment is now settled * * * what amounts to a deprivation of property without due process of law, or what is a denial of equal protection of the laws is often difficult to determine, especially where the question relates to the property of a quasi-public corporation and the extent to which it may be subjected to public control."

On behalf of the utility, the Court said:

> "A statute which, by its necessary operation, compels a turnpike company, when charging only such tolls as are just to the public, to submit to such further reduction of rates as will prevent it from keeping its road in proper

repair, and from earning any dividends whatever for stockholders, is as obnoxious to the Constitution of the United States as would be a similar statute relating to the business of a railroad corporation having authority, under its charter, to collect and receive tolls for passengers and freight.

"A state enactment or regulation made under the authority of a state enactment, establishing rates for the transportation of persons or property by railroad that will not admit of the carrier earning such compensation as under all the circumstances is just to it and to the public, would deprive such carrier of its property without due process of law and deny to it the equal protection of the laws, and would therefore be repulsive to the Fourteenth Amendment of the United States."

But on behalf of the public, the Court also said:

"In the discussion of the question the plaintiff contended that a railroad company is entitled to exact such charges for transportation as will enable it, at all times, not only to pay operating expenses, but also to meet the interest regularly accruing upon all its outstanding obligations, and justify a dividend upon all its stock; and that to prohibit it from maintaining rates and charges for transportation adequate to *all* those ends will deprive it of its property without due process of law, and deny to it the qual protection of the laws. This contention was the subject of an elaborate discussion; and, as it bears upon each case in its important aspect, it should not be passed without examination.

"In our opinion, the broad proposition advanced by counsel involves some misconception of the relations between the public and the railroad corporation. It is unsound in that it practically excludes from consideration the fair value of the property used, omits altogether any

consideration of the rights of the public to be exempted from unreasonable exaction, and makes the interest of the corporation maintaining a public highway the sole test in determining whether the rates established by or for it are such as may be rightfully prescribed as between it and the public. * * * It cannot therefore be admitted that a railroad corporation on maintaining a highway under the authority of the State may fix its rates with a view solely to its own interests, and ignore the rights of the public. But the rights of the public would be ignored if rates for the transportation of persons or property on a railroad are exacted without reference to the fair value of the property used for the public or the fair value of services rendered, but in order simply that the corporation may meet operating expenses, pay the interest on its obligations, and declare a dividend to its stockholders.

* * *

"It cannot be said that a corporation is entitled, as of right, and without reference to the interests of the public, to realize a given per cent upon its capital stock. When the question arises whether the legislature has exceeded its constitutional powers in prescribing rates to be charged by a corporation controlling a public highway, stockholders are not the only persons whose rights or interests are to be considered. The rights of the public are not to be ignored. * * * The public cannot properly be subjected to unreasonable rates in order simply that stockholders may earn dividends. * * * If a corporation cannot maintain a highway and earn dividends for stockholders, it is a misfortune for it and them which the Constiutution does not require to be remedied by imposing unjust burdens upon the public."

And summing up the whole case, the Court finally said:

"The utmost that any corporation operating a public highway can rightfully demand at the hands of the Legislature when exerting its general powers, is that it receives what, under all the circumstances, is such compensation for the use of its property as is just both to it and to the public."

It will be noted that in nearly all the above excerpts from the opinion of Mr. Justice Harlan in the case of *Smyth* vs. *Ames*, reference was made to the necessity of taking into consideration the *fair value* of the property of the utility in any attempt to fix rates for public service. After concluding these general observations upon the principles of rate-making Mr. Justice Harlan went on to enumerate the several factors or elements of value to be taken into consideration in determining *fair value* as follows:

"We hold • • • that the basis of all calculations as to the reasonableness of rates to be charged by a corporation maintaining a highway under legislative sanction must be the fair value of the property being used by it for the convenience of the public.

"And in order to ascertain that value, the original cost of construction, the amount expended in permanent improvement, the amount and market value of its bonds and stocks, the present as compared with the original cost of construction, the probable earning capacity of the property, and the particular rates prescribed by statute, and the sum required to meet operating expenses, are all matters for consideration, and are to be given such weight as may be just and right in each case.

"We do not say that there may not be other matters to be regarded in estimating the value of property.

"What the company is entitled to ask is a fair return upon the value of that which it employs for the public convenience.

"On the other hand, what the public is entitled to demand is that no more be exacted from it for the use of a public highway than the services rendered by it are reasonably worth."

In the more recent case of *Simpson vs. Shepard*, 230 U. S. 352, decided June 9, 1913, commonly known as the *Minnesota Rate Cases*, Mr. Justice Hughes in delivering the opinion of the Supreme Court quoted with approval a considerable portion of the above language used by Mr. Justice Harlan in the case of *Smyth vs. Ames*, and summarized the same briefly as follows; (344):

"The property of the railroad corporation has been devoted to a public use * * * but * * * the private property embarked in it is not placed at the mercy of legislative caprice. It rests secure under the constitutional protection which extends not merely to the title but to the right to receive just compensation for the favors given to the public * * * In determining whether that right has been denied, each case must rest upon its special facts. But the general principles which are applicable in a case of this character have been set forth in the decisions.

"The basis of calculation is the 'fair value of the property' used for the convenience of the public. What the company is entitled to demand, in order that it may have just compensation, is a fair return upon the reasonable value of the property at the time it is being used for the public.

"The ascertainment of that value is not controlled by artificial rules. It is not a matter of formulas, but there must be a reasonable judgment having its basis in a proper consideration of all relevant facts."

Thus we see that we have the authority of the highest court in our land for the proposition that in ascertaining the fair value of the property being used by a public utility for the convenience of the public it is proper to consider the amount actually expended in permanent improvements, the amount and market value of its bonds and stocks, the present as compared with the original cost of construction, the probable earning capacity of the property under the particular rates prescribed by statute, and the sum required to meet operating expenses.

But it is to be noted that in this case the Supreme Court did not say that any single one of these elements of value was to be accepted as the value of the property for rate-making purposes.

To the contrary it expressly said in effect that *no one of them* should be accepted conclusively as the value of such property for that purpose, in that it said that *all* were matters for consideration. Hence, if one were to be accepted as conclusive without consideration of the others, this ruling would be violated.

Nor did the Supreme Court say that any one of these values should have *predominating* weight in all cases. To the contrary, it expressly said that all "are to be given *such weight* as may be *just and right* in *each* case."

Nor did it confine courts and commissions to a consideration of only these factors or elements of value. For it expressly said: "We do not say that there may not be other matters to be regarded in estimating the value of the property."

The language of Mr. Justice Harlan in the case of *Smyth vs. Ames* last above quoted relating to the ascertainment of the fair value of property for rate-making purposes has frequently been misinterpreted and misapplied in rate investigations. The general conception of this language seems to be

that it requires an accurate and scientific ascertainment to the last cent of the actual value of the property in question on the basis, first, of its original cost, second, of the cost to reproduce the same, third, of the value of the utility's stocks, bonds or other outstanding securities, and fourth, of the value of the property as indicated by its earning capacity under the existing and proposed rates.

The precise ascertainment of the exact actual original cost of the property of a public utility which has been long in service having been found virtually impossible, the tendency has been to cast aside entirely this consideration. Likewise the value of the property as indicated by the amount and market value of its stocks and bonds and as indicated by its earning capacity under existing rates, has been cast aside as not entitled to serious consideration for the reason that both depended so largely upon the rates which have been in force up to the time of the investigation, as to make these evidences of value an unsafe and unsatisfactory criterion in a case involving the propriety of such rates themselves.

The cost of reproduction on the other hand, was always susceptible of a reasonably accurate, scientific estimate, depending as it does solely upon an accurate inventory and the estimate of competent engineers of the value of each article therein enumerated. Consequently we find that in nearly all valuations for rate-making purposes the reproduction cost of the property has been taken as the primary basis for the ascertainment of its fair value, modifications having usually been made in such reproduction cost as a concession to what was deemed to be fairness in the particular case under consideration.

In short the tendency has been to give *predominating weight* to the reproduction cost value of the property of a public utility in ascertaining the fair value of such property for rate-making purposes, and to disregard almost entirely the other evidences of value furnished by the original cost of the property, its value as indicated by the amount and market

value of its stocks and bonds, and its value as indicated by its earning capacity under the existing or proposed rates.

The ascertainment of the fair value of the property of a public utility is not to be controlled by artificial rules or fixed formulas. It is not a thing to be computed on an adding machine or comptometer. It is first, last and all the time a matter calling for the exercise of sound judgment, and such judgment must in turn be based upon a full and thorough consideration of all the material facts. The original cost of the property, as nearly as ascertainable, is one of these material facts, in that the actual cost to the investor must of necessity have an important bearing upon the fair value of his property dedicated to the public use at the time of its acquisition. The reproduction cost of the property is another material fact to be considered, for the reason that it throws light upon the actual present value of the property used in the public service, and enables us to give such consideration as may be just and proper to losses in value which have ensued through the property being used in the public service, and as well to any accretions in value which the property may have undergone during the same period. The market value of the bonds and stocks of a utility having such, and the amount and character of the outstanding obligations of one not having bonds, is a material fact to be considered for two reasons, first, for the evidentiary value which it has as to the generally accepted commercial value of the entire property, and second as bearing upon the propriety of any order of the Commission fixing rates which might destroy public confidence in the desirability of investment in the obligations of the utility which might have to be issued in order to enable it to render adequate service at present or make proper and necessary extensions and improvements to its service in future. And finally we consider the earning value of the property of a public utility under the existing rates a most material fact in determining the fair value of such property, in that the only real value which any property has to its owner is its earning value or capacity, and such earning

capacity must of necessity be considered in any attempt to arrive at its fair value to such owner.

But we are by no means to be understood as meaning that having ascertained these four values, it would be proper to add them together and then divide the total by four in order to arrive at the fair value of the property for rate-making purposes. Such a course would be absurd and childish, not worthy even the experiment of rational men. For in one case, the original cost of the property may be entitled under all the circumstances to little or no consideration in arriving at the fair value of the property for rate-making purposes, although it is difficult to see how any rational mind could disregard entirely all evidence of the original cost of the property to the investor in the determination of the final question of value. In another case, such as that of a great railroad company which had many years ago acquired large quantities of land at nominal figures and had lived to see such land enhance in value a thousand-fold by reason of its peculiar adaptability to the uses of said railroad, the reproduction or replacement cost of such land at the present time would be entitled to but slight consideration in ascertaining the rates which it would be fair to permit such railroad to charge its patrons for its service. In another case the market value of the stocks and bonds of a utility might be so far inflated or depressed by temporary conditions as to throw little or no light upon the question of the actual value of the property represented thereby. And in another case the earning value of the property might be so evidently and obviously attributable to excessive rates of charge under existing schedules as to justify it being entirely disregarded in ascertaining the propriety of a proposed new schedule of rates. And even after considering these four elements or factors of value we find that in none of them have we touched upon the very material question of the character of service rendered by the utility to the public. For, of course the value of the property of a utility which is able to render good and satisfactory service to its patrons is greater both to the public and to itself

than that of one which is able to render only poor and unsatisfactory service.

When, in valuing the property of a public utility for rate-making purposes, we have considered its original cost, its reproduction cost, the amount and market value of its bonds and stocks, the earning value of the property, and the worth of the service to the consumer, we find that the problem is by no means solved.

The true solution lies much deeper than any such mere formula of terms as this. It is fundamental, and in its last analysis will be found to lie in placing a rational, reasonable and equitable interpretation upon the term "value" itself.

When we speak ordinarily of "value" we have in our mind a more or less definite conception of the kind of value we mean. In one case it is exchange value, in another it is market value, in another it is service value, in another it is functional value, in another it is value for taxation, and in another it may be the value which property has in a case involving the exercise of the power of eminent domain. Each of these several conceptions of value involved a different idea and a different meaning from that of any other conception of value.

And so when we speak of "fair value" in a rate-making case we find we must of necessity acquire an entirely new and distinct conception of this term "value." It is not a composite of all other values. Nor is it of necessity merely a modification of any of the aforegoing conceptions of value, any more than a newly discovered star in the firmament is a composite of all the other stars in the firmament or a modification of any one of the same. But it is an entirely new and distinct "value." It may in some respects partake of the characteristics of some other values, or of all other values, but nevertheless it is a conception of value for a different purpose, and is as readily susceptible of ascertainment independently of any other particular value, as such other particular value is susceptible of ascertainment independently of it.

The *purpose* of the ascertainment of any particular value can never be lost sight of in determining what that value is. Hence when we know that the *purpose* of ascertaining the "fair value" of the property of a public utility is to enable the State to fix rates for service, it would be illogical in the extreme to adopt as to the standard of such "fair value," some other value the purpose of which is *not* to fix rates for service, but is based upon some entirely different and possibly contradictory consideration. Thus a house may be for sale in the open market. Our conception of its value is therefore necessarily its market value. A man may have on his property a water-right which has no market value as such but is greatly desired by a lower mill-owner. The price paid in such instance would be based upon the "service value" of such water-right. And so we could go on multiplying instances of different conceptions of value almost without number. In every case we would find that the final and controlling conception of value must of necessity depend upon the end or aim in view of one or both the contracting parties.

And so in the case of ascertaining the "fair value" of the property of a public utility. Its purpose is the fixing of rates—rates which shall be fair both to the public and to the utility. And if the rates are to be fair, it must logically follow that the *value* which is to be used as the basis of those rates must be fair, and must at all times be predicated upon that ultimate use which is to be made of the same.

Therefore it is that when we come to fix the "fair value" of the property of a public utility for rate-making purposes, and reach the point at which we must of necessity consider the original cost of such property, we must take such original cost into consideration just so far as in our best judgment it bears upon the question of fairness as between the public and utility. If, under the circumstances of the particular case, it would seem to be fair and just to give the original cost of the property controlling weight in our final determination, this should be done. But if we find the property has actually cost either far more or far less than we consider its real

worth as between the public and the utility, then such original cost should be given but little weight.

Again, when we reach the point at which we must consider the reproduction cost of the property, we must search our consciences, as it were, to determine just what weight should be given such reproduction cost. In one case it will seem to us in fairness entitled to great weight, in another to but little.

And so on all down the list of the various evidences of value which we know must be considered—always weighing one against the other, or in the light of the other, just as we judge the character of an individual by a due consideration of all his manifold traits and characteristics.

The fixing of rates for public service, and incidentally the valuation of the property for the use of which those rates are to be charged, has been termed "an equitable process of the highest order."

And such in fact it is and must be allowed to remain, if justice is to be done at all times and under all circumstances to those whose rights are involved in such inquiries.

PHYSICAL PROPERTY.

Directly Distributed Costs.

By the term "directly distributed costs" as used in this proceeding is meant all such costs as can satisfactorily be allocated or apportioned to the fixed capital accounts to which they relate. The meaning of the term can best be understood by stating that it excludes all such charges as contractors' profits, omissions and contingencies, brokerage and discount, engineering and superintendence, law expenditures, interest, insurance and taxes during construction, general executive costs and other similar expenditures which are nearly always incurred during construction, but which cannot satisfactorily be apportioned to any particular piece of construction as the work progresses, and must therefore subsequently, or at regular intervals, be apportioned over all the work of construction done during a given period.

In this case, as we have hereinbefore explained, the Commission, by reason of the agreement of counsel and engineers, was relieved of the necessity of making a detailed investigation into the original and reproduction cost of these items of the company's tangible physical property.

The Commission's conclusions upon these values as of September 30, 1913 are to be found in Exhibits Nos. 29, 30 and 31, and may be summarized as follows:

Item	Balto. City	Md. Elsewhere	Total
Real Estate	$ 745,708	185,870	931,582
Equipment	2,097,265	798,058	2,795,323
Exchange Lines	2,551,644	2,358,933	4,910,577
Toll Lines	11,508	1,466,207	1,477,715
Total.....	$5,396,120	4,719,077	10,115,197

In arriving at his estimates of the directly distributed costs, Mr. W. W. Anderson, Superintendent of the Investigation, on behalf of the Commission, based his estimates in the main upon known costs of similar construction in Maryland and other jurisdictions supplemented by his judgment as a practical telephone engineer as to the fair cost of reproducing the property of the respondent in this State.

The company's engineer, Mr. G. W. Whittemore, on the other hand, based his estimates upon data covering a period of several years' antecedent to the appraisal showing the actual cost to the company of construction work.

It is significant that there was an initial difference of less than $500,000 between these two engineers in their total valuations of the above items (less real estate) valued by the Commissions at $9,183,615. These differences were subsequently reconciled in conference as hereinbefore explained.

In the case of the real estate there was a greater initial difference between the appraisers, about 20 per cent., the company's figures being based almost wholly upon the original cost of the land and buildings and the Commission's appraisers upon the theory of reproduction cost. During the course of the conferences on these items it was found that

a large part of the difference arose from the fact that the company's St. Paul Exchange had been constructed immediately after the Baltimore Fire of 1904, when building costs of all kinds were abnormal, and in view of this fact, the company conceded a material reduction in its figures. Other concessions were also made in a spirit of mutual fairness, with the result that the final figure as to the real estate was agreed upon and subsequently ratified by the Commission.

At a later period additions to the above figures were made for construction between September 30, 1913 and June 30, 1914, but as these additions embraced the overheads as well as the directly distributed costs, they will be embodied in subsequent summaries.

To the above figures, however, should be added the cost of the company's rights of way. The details of the appraisals of these rights of way are to be found in Exhibits Nos. 61 and 62, and the methods by which they were made by the respective engineers are set forth in Mr. Anderson's and Mr. Whittemore's testimony given March 31, 1915. In this instance there was considerable difference between the engineers which they were unable to reconcile. The Commission concluded after full consideration of the question that the company's figures in this respect were not only fair, but were extremely conservative, and therefore found them to represent the value of the company's rights of way, (exclusive of easements in the public streets of Baltimore City). These figures were as follows:

Baltimore City	Md. Elsewhere	Total
$34,000	313,659	347,659

The addition of these rights of way brought the total figures for the directly distributed costs up to the following:

Baltimore City	Md. Elsewhere	Total
$5,430,120	5,032,736	10,462,856

Construction Overheads.

In defining the term "directly distributed costs" we have in substance defined the term "Construction Overheads" as being those costs which enter into the total cost of physical property in place, but which cannot be satisfactorily allocated or apportioned to the fixed capital accounts to which they relate.

As used in this case, the term was designed to embrace the following items, some of which are found in the standard accounting system for telephone companies prescribed by the Interstate Commerce Commission and in Accounting Circular No. 8, Standard Telephone Accounts, Bell Telephone System, effective January 1, 1913, and some of which are not so found, but which would seem properly to belong in the same category:

Contractor's Profits, Omissions and Contingencies, Interest during Construction	Account	268
Engineering and Superintendence	"	271
Law Expenditures during Construction	"	272
Taxes during Construction	"	273
General Executive Costs	"	274
Insurance during Construction	"	274
Miscellaneous Construction Expenditures	"	274

Some or all of these items are frequently confused in the literature of rate-making with certain items of intangible values, such as organization (Account 201), going value, cost of establishing the business, development cost, etc., the whole being grouped indiscriminately as "overheads."

But it will be noted that the above items embraced within the term "Construction Overheads" are in no sense intangible values, and that they do not partake of the nature of such.

The items which we have enumerated as "construction overheads" form just as much a part of the actual cost of the physical property in place when we come to value it, as do the items of material and the cost of the day-laborer who finishes the property in the shop or puts it in place on the ground. The only difference is that while we can always allocate or

apportion to the specific account the cost of the article as it comes from the shop or factory and the cost of the labor directly used in putting it in place, we cannot so readily allocate or apportion to individual articles, or even individual accounts, those costs which are spread over a great number of both similar and dissimilar articles such as "interest during construction," "engineering and superintendence," and the others above enumerated. These are "overheads" in the sense that they are spread over a great number of articles, but they are in no sense "intangibles," since they are just as clearly a cost of the physical property as those costs which we have termed "directly distributed costs." "Intangibles" on the other hand relate more particularly to those items which pertain to the "business" of the utility or to the additional value which it has by reason of being a going concern, rather than to its physical property.

Thus the expenses of organization are incurred not for the mere purpose of constructing the plant and putting it in condition to do business, but more particularly and specifically for the purpose of conducting the business when the plant is in a position to do business. And so the "cost of establishing business," "going value," etc. all relate to the *business* as such rather than to the physical property of the utility.

We make this explanation at this length for the reason that there is an idea in some quarters that when "construction overheads" such as we have enumerated are allowed in a valuation for rate-making purposes, the utility is being given the benefit of some imaginary or wholly speculative cost to which it has not proven itself clearly entitled, but which is given it merely upon the assumption that it or something else like it must have been incurred in the construction of its plant and property. We trust that we have made it clear that such is not the case, but that these "construction overheads" when established, are just as much a part of the actual cost of the physical property as is the labor and material which have entered into and been directly traced to each separate item of the same.

With this explanation we do not feel that it is necessary to go with great detail into the particulars of the several items allowed on this account. It will suffice to say that the Commission had the benefit of three estimates of these construction overheads, to wit: the estimate of Mr. Anderson, the Commission's Superintendent of the Investigation, of Mr. Phelps, the Commission's Chief Engineer, a gentleman of wide experience in valuation work of all kinds, and of Mr. Whittemore, the company's engineer in direct charge of this investigation on behalf of the company, and that these three estimates were independently made. In view of the manner in which the respective engineers arrived at their unit costs, it was virtually conceded that the company would not be entitled to any allowance on account of contractors' profits. The "miscellaneous construction expenditures," Account No. 274, were merged with the other overheads.

These estimates, the reports relating thereto, and the summaries of the same are to be found in Exhibits Nos. 63 to 75 inclusive.

Expressed in percentages, such estimates and the findings of the Commission based upon the reports and a great volume of other evidence heard on the subject, were as follows:

Item	Company	Mr. Anderson	Chief Engineer	Commission
Group A				
Directly Distributed Costs, including Rights of Way				
Group B				
(Expressed in % of A)				
Omissions and Contingencies	2.97	2.48	5.00	2.97
Group C				
(Each expressed in % of A+B)				
Engineering and Superintendence	5.26	2.50	5.00	5.26
Taxes during Construction	.04	.035	2.50	.04
General Executive and Legal	2.48	2.25	...	2.43
Insurance during Construction	.85	.85	...	.85
Group D				
(Expressed in % of A+B+C)				
Interest during Construction	7.00	4.00	12.00	5.25
Ratio of Aggregate Construction Overheads to Directly Distributed Costs, including Rights of Way	19.36	13.66	26.42	17.67

The Commission's findings as to the proper allowances for the several Construction Overheads were duly apportioned to the property in Baltimore City and Maryland Elsewhere and brought the total figures for the physical property of the company up to the following:

	Balto. City	Md. Elsewhere	Total
Directly Distributed Costs.	$5,430,120	$5,032,736	$10,462,856
Construction Overheads ..	959,750	889,513	1,849,263
	$6,389,870	$5,922,249	$12,312,119

Working Capital.

In the instructions to the appraisers issued in this investigation, the term "working capital" was defined as follows:

> "Working capital is the amount of cash and supplies, or other available assets readily convertible into cash without pecuniary sacrifice, reasonably necessary to be kept on hand by the company for the purpose of meeting its current obligations as they arise, and enabling it to operate economically and efficiently. It should be taken to embrace such a stock of materials and supplies as is reasonably necessary to enable the company to make repairs and minor replacements chargeable to operation without unreasonable delay or expense, and to meet operating contingencies and emergencies not taken care of by other reserves or allowances, and generally should be a sum reasonably sufficient to bridge the gap between outlay and reimbursement. It should be determined with due regard to the company's ordinary outstandings, both payable and receivable, the ordinary condition of its stock or supplies in hand, the natural and ordinary risks of its business, the condition of its credit, its custom in the purchase of supplies, and as to carrying its accounts with banks and others, whether at interest or otherwise, its method of rendering bills for service and time required for the payment thereof, the character and nature of its obligations funded and unfunded, and all other circum-

stances bearing upon the economical and efficient operation of the business."

The subject of working capital is covered in pages 1257-1339 inclusive of the record, containing the remarks of counsel and testimony of witnesses, and by Exhibits No. 76 to 82 inclusive filed in connection with the same.

It is obvious from the above definition that every public utility, great and small, must at all times carry, in addition to a reasonable stock of material and supplies necessary for current construction and repairs, a certain amount of "liquid assets" which it would be inexpedient to invest in fixed property and upon which it can therefore not expect to receive any direct return from the public. The carrying of these "liquid assets" is as much an incident of the business in which the company is engaged as is the carrying of its physical assets, since the latter would be of no benefit to the public if the company were not in a position to operate the same in the public service. Hence it is only reasonable that in any valuation of the utility's property for rate-making purposes due account should be taken of the working capital so invested and the utility permitted to earn a fair return upon the same.

This principle is universally accepted, and the only questions which ever arise in connection therewith relate to the manner in which the working capital should be computed.

In this investigation three entirely different and distinct theories for its computation were advanced.

Mr. Anderson, the Commission's Superintendent of the Investigation, in his Exhibit No. 78, explained by him on pages 1332 to 1339, inclusive, of the record, stated that the computation of a proper allowance for working capital was not strictly an engineering problem, but rather a problem of finance or business upon which the Commission was best qualified to pass in the exercise of its sound judgment and discretion. He further stated that in response to the request of the Assistant General Counsel he had prepared an estimate showiwgthat an allowance of $300,000 for this item would be

reasonable, this allowance being based partly on the difference between the company's working assets and working liabilities as shown by its books during the years 1913 and 1914, but more particularly upon a consideration of the company's average monthly gross expenses during the year 1914. He estimated this sum to be 2.9 per cent. of the agreed directly distributed costs plus omissions and contingencies. In support of this conclusion he cited the allowances for working capital in a number of other investigations and showed that they ranged from 2.9 per cent. to 4.6 per cent. of the investment.

The estimate of Mr. Phelps', the Commission's Chief Engineer, was $500,000, made up of $250,000, the estimated cost of the company's pay roll for a month and a half, $195,000, three months' material and supplies, $25,000 for advances on account of labor, expenses, team-hire, etc., paid the men traveling around the State and $10,000 for deposits in the rural banks drawing no interest.

The estimate of Mr. Paine, the company's engineer, was $524,900, made up as follows:

Advances to employes, etc.	$ 27,000
Bank deposits	119,000
Earned but not collected	226,600
Materials and supplies	152,300
Total	$524,900

This estimate was explained at length in Mr. Paine's Exhibit No. 81, and in his testimony covering pages 1277-1331 of the record. The only figures in Mr. Paine's estimate which would seem to require comment or explanation are those relating to the deposits in bank.

Mr. Paine explained that there are twenty-seven little banks in rural communities which, in consideration of the maintenance therein of small deposits, perform under the direction of the company's treasurer, all the functions of an employe engaged in the collection of money from the subscribers, performing these functions with much greater efficiency and economy than they could be performed by the com-

pany's employes. Upon these deposits the company receives no interest. The deposits in the three banks patronized by the company in Baltimore City were shown to range from $50,000 to over $300,000 according to varying conditions, the interest on these deposits being very small, and being immaterial in this connection for the reason that it is accounted for among the company's miscellaneous earnings.

In addition to the above the Commission had before it, in Exhibits No. 79, 80 and 82 exhaustive summaries of allowances made by other commissions and by engineers throughout the country on account of working capital in other cases, these allowances ranging generally between four and seven per cent. of the plant investment.

In the light of the evidence before it, the Commission concluded that an allowance of $500,000 for working capital would be reasonable in this particular case on the reproduction cost new basis.

Inasmuch as the allowance for working capital is not subject to depreciation, it is not usually added to the appraisal until the present or depreciated value of the entire property has been ascertained.

Additions to Plant from September 30, 1913 to June 30, 1914.

All telephone companies subject to the jurisdiction of this Commission are required to file their annual reports as of June 30.

It was orginally hoped to have this investigation concluded early in 1914, but the work attending the appraisal grew to such magnitude that this was found impossible and the date was moved up to June 30, 1914. Consequently the inventory was made as of September 30, 1913, with the understanding that the company's books and vouchers would be resorted to for the actual cost of all additions up to June 30, 1914.

These additions are set forth in detail in Exhibit No. 108 filed at the conclusion of the hearing and were understood to embrace all proper allowances for construction overheads.

They are set forth in gross in the following table:

	Balto. City	Md. Elsewhere	Total
As of Sept. 30, 1913.....	$6,389,870	$5,922,249	$12,312,119
Additions to June 30, 1914	379,160	370,918	750,078
Total.....	$6,769,030	$6,293,167	$13,062,197

It is to be noted that we have several times referred to the above figures as representing the reproduction cost *new* of the respondent company's property in this State.

But as a matter of fact the property is not *new*. To the contrary practically all of it has been in use for an appreciable time, and the great bulk of it has been in use for some ars.

The next question naturally to arise is whether any deduction at all is to be made from the above figures by reason of the fact that the property, taken in its entirety, is no longer new, and if so, what deduction shall be made on such account.

This brings us to the subject of "Depreciation," which will be next discussed.

Depreciation.

That the element of depreciation must be duly considered n any valuation of the property of a public utility for rate-aking purposes has been definitely determined by the Supreme Court of the United States in the case of *City of Knoxville vs. Knoxville Water Co.* 212 U. S. 13, decided in 1909, in which that court said in speaking of the valuation of the property of a water company:

> 'This valuation was determined • • • by ascertaining what it would cost • • • to reproduce the existing plant as a new plant. The cost of reproduction is not always a fair measure of the present value of a plant which has been in use for many years. The items composing the plant depreciate in value from year to year in varying degree.

"* * * It is not easy to fix at any given time the amount of depreciation of a plant whose component parts are of different ages with different expectations of life. But it is clear that some substantial allowance for depreciation should have been made in this case."

In the more recent case of *Simpson vs. Shepard*, 230 U. S. 352, decided in 1912, the Supreme Court said:

"When an estimate of value is made on the basis of reproduction new, the extent of existing depreciation should be shown and deducted, * * * We are concerned with a charge of confiscation of property by denial of a fair return for its use and to determine the truth of the charge there is sought * * * the present value of the property. * * * When particular physical items are estimated as worth so much new, if in fact they be depreciated, this amount should be found and allowed for. If not * * * the physical valuation is manifestly incomplete."

Unfortunately, however, the Supreme Court has never laid down any definite rule for the ascertainment of existing depreciation or even intimated whether in valuing the property of a public utility for rate-making purpose, the State or other regulatory body should determine the measure of existing depreciation by mere physical deterioration of the property, or take into consideration that additional, functional deterioration which practically all property undergoes with the lapse of time, but which in large part may be said to be latent at any particular time.

In the case now under investigation both these theories were advanced. The company, on the one hand, contended in effect that the true present or depreciated value of its property was to be determined solely with reference to its actual, present physical condition as determined by inspection.

Counsel for the People and for the Protective Telephone Association, on the other hand, contended that the true test of the present or depreciated value of the property *for rate-making purposes*, must depend upon and be measured by the unexpired life of the present plant and property as a whole.

Counsel for the People conceded that when the property of a public utility is used up or consumed, wholly or in part, in the service of the public, the proprietors of the utility are just as much entitled to get back from the public the value of the property so consumed as they are entitled to get back the monies expended in operation, or to receive a fair return upon their investment, and that the utility is entitled of right to embody in its charges for service a sum not only sufficient to keep its property currently up to the highest standard of efficiency for rendering service, but also a further sum to be reserved by the utility for the purpose of replacing such property with other property of equal value the moment the original property goes out of service from wear and tear, inadequacy, obsolescence or any other cause.

Hence if we were dealing now with a new property which had begun operations under the existing system of State regulation, the problem before us would present no difficulties.

In such a case, under the approved system of accounting at present in force, it would be necessary for the company to set up on its books one or more depreciation reserve accounts into which would be paid out of earnings at regular periods amounts equal to the depreciation which the property was estimated to have undergone during such periods. The result at any given time would be that the utility would have a depreciated property, but would have a fund in its reserve accounts exactly balancing the aggregate of such depreciation. And if the funds paid into such reserves, had been invested in new and additional plant, it will be seen that the depreciation which the original property had undergone would have been made up by such additional property so that the aggregate value of the original property, less the depreciation, plus the

additions paid for out of the reserves would exactly equal the original investment.

The same result would follow even though the earnings had not been sufficient to enable the utility to set up such depreciation reserves. In such a case the utility would have the depreciated property, but would at the same time have a claim against the public growing out of the fact that the utility had not been repaid the depreciation which its property had undergone. Consequently the depreciated value of the property, plus the claim against the public on account of such depreciation, would always equal the original investment.

Or, as a third alternative, the public might have paid a part of the depreciation, but not the whole of it. In such a case the utility would have the depreciated property, plus the sum in its depreciation reserves, plus its claim against the public for the balance of the depreciation, and the sum of the three would again equal the original investment.

In any of these three cases it will be seen that the utility would be entitled to earn upon the actual value of the property embraced in the original investment, but would not be permitted to earn upon the reserves or upon any new property purchased out of the same. Hence, in case of a company which had maintained full depreciation reserves and invested the whole in additional plant, the problem would be merely to ascertain the value of the entire plant, and deduct from such value the amount of the reserves. The difference would be the value of the stockholders' investment upon which they would be entitled to a return, and the public would thus get automatically the return upon its share of the total investment, in that it would get the benefit of the use of the same, and would not have to pay the stockholders a return thereon.

The correctness of this principle was recognized by Mr. Theodore N. Vail, President of the American Telephone & Telegraph Company in his report for 1913 to the stockholders, where he said:

"The policy of investing the depreciation reserve in revenue-earning plant has continued, and the public is getting the advantage of the use of a large amount of plant upon which no dividends or interest charges have to be met."

Consequently it would seem to be clear that the ideal condition for a public utility subject to state regulation would be for such a utility to have a depreciation reserve created and kept up by the public, at all times ample to cover not only the existing, visible deterioration of its property, but also all latent depreciation, in order that it might be in a position to make replacements when and as required. Such a reserve would stand as a perpetual guarantee to the utility against any loss the property might sustain in the public service, and at the same time as a perpetual guarantee to the public that the utility would always be in a position to render adequate service.

In such a case all questions of the actual existing depreciation of the plant would be immaterial, save in so far as its condition might bear upon its efficiency. For if the reserve were 20 per cent., and existing depreciation 10 per cent., utility would still be entitled to earn only upon 80 per cent. of the entire investment as it might be found to exist at any given time. Nor would it make any difference if the existing depreciation should fluctuate from year to year—8 per cent. one year and possibly 18 per cent. another year—for if the reserves were ample in the first instance, they would always cover such depreciation, and even though they might under extreme conditions fall short of so doing, the stockholders would have for the time being their claim against the public, which would bring the total value of their investment up to its original amount.

But in the case now before us, we are not confronted by such a situation. Here we have a company which has been in operation in this State for over thirty years. During that period the bulk of its property has been renewed time and again, the renewal of the average whole having probably been

at least twice. Meanwhile the utility has not been controlled by State regulation in the sense in which we now use that term. Within limits, the company has been free to make what charges it chose for service, and to use its net revenues at will either in declaring dividends to its stockholders, or in buying and installing property which is now to be found in its existing plant. For many years, and in fact, until quite recently it maintained no reserves for the replacement of property worn out in the public service or retired for other reasons. Such replacements were made either out of earnings or out of borrowed capital, we know not which. The books, kept by entirely different systems from those now in vogue, fail to disclose with any degree of certainty how much or how little of the present property was purchased out of earnings or charged to the operating expense accounts. True, as the figures from these books are now presented to us, they show no material or excessive earnings in the past upon the basis of the average annual plant investment. But who can say with any degree of assurance that the plant investment itself was made solely out of outside capital, or that it was not in part made up of funds which under the present system of accounting would appear as earnings?

It is impossible for us to determine at this date the precise amount actually invested in this enterprise by the proprietors themselves or how much, if any, of the investment has been contributed by the public.

These conclusions would seem to be fully justified, not as a criticism, but as a fact, by the following excerpt from the annual report of 1910 by Mr. Vail, to the stockholders of the American Telephone and Telegraph Company:

> "The entire disregard or underestimating of depreciation and future replacements is the cause of nearly all the financial disasters that have occurred in the telephone business, and has been the common failing of new comers in the telephone field from the beginning to the present time.

"Current repairs on new plant, even of the old-time temporary character, were small; no surplus or reserve was provided; profits were apparently large, as were dividends.

"A false atmosphere of prosperity surrounded the business which was not dispelled until replacements of plant through decay or obsolescence became imperative; • • • until a condition existed where, to correct mistakes of the past, capital had to be expended without producing any corresponding increase in the revenue.

"The inevitable was in some cases postponed by excessive charges to construction account, but came in time, as it is bound to come, under such conditions. • • • "

This, then, is the history of the company the present value of whose property we are now called upon to determine.

To ascertain from its books as they stand, how much of its property was paid for by capital advanced by the proprietors and how much by funds collected from the public is impossible. To go back and rewrite its books at this late date is equally impossible.

All we know with certainty is that prior to 1907 this company did not maintain the reserves necessary to meet the depreciation of its property as it arose, and that it now has reserves which its counsel and witnesses declare to be wholly inadequate.

Turning to the decision of the Supreme Court in the *Knoxville Water Company Case* above referred to, we find that the court has there stated:

"A water plant • • • begins to depreciate from the moment of its use. Before coming to the question of profit at all, the company is entitled to earn a sufficient sum annually to provide not only for current repairs, but for making good the depreciation and replacing the parts of the property when they come to the end of their life. The company is not bound to see its property grad-

ually waste without making provisions out of earnings for its replacement. It is entitled to see that from earnings the value of the property invested is kept unimpaired, so that at the end of any given term of years the original investment remains as it was at the beginning.

"If, however, a company fails to perform this plain duty and to exact sufficient returns to keep the investment unimpaired, whether this is the result of unwarranted dividends upon over-issues of securities or ommission to exact proper prices for the output, the fault is its own. When, therefore, a public regulation of its prices comes under question, the true value of the property then employed for the purpose of earning a revenue can not be enhanced by a consideration of the errors in management which have been committed in the past."

This language would seem at first blush to justify a public service commission or other regulatory body in holding that the proprietors of a public utility which had operated under the conditions above pictured, should be obliged for all time to bear the loss in the value of their investment which they had failed to guard against in the past by setting up and maintaining adequate depreciation reserves.

But a close study of this decision and of the numerous other decisions of the same court upon the subject of state regulation of public utilities leads us to believe that such language should not be so construed.

In the first place it is seldom wholly just to penalize anyone for failing to do a thing which he had no reason to believe it was his duty to do. Thirty years ago, or even twenty years ago, the theory of the depreciation reserve was hardly known, much less generally understood. As we know it today, it is an evolution in accounting so far as applied to public utilities. It has, of course, always been understood that a business man must make provision in advance against the time when the property used in his business will wear out and be no longer fit for use. But the idea that the pro-

prietor of a public utility had an absolute right to charge the public a sum sufficient to create and maintain such a reserve, was born of the necessity which arose when the states first began to engage actively in the regulation of rates, and to say that the man engaged in a public business of this character should be limited in his profits to a fair return upon his investment.

And in the second place, a liberal interpretation of this language of the Supreme Court would in many cases defeat the very object which the State has in view in regulating such enterprises,—the furnishing of adequate service at reasonable rates.

As we have seen in our illustration of the new company starting under State regulation, an ample reserve is necessary to enable the utility at all times to render adequate service. Without such a reserve, the utility whose property must be replaced when it is worn out and no longer capable of rendering service, must either secure outside capital for the purpose of making such replacements, a thing it would find great difficulty in doing under such circumstances, or it would have to charge its patrons a higher rate for service in order to raise such funds. This would result in frequent fluctuations in the prices for service, and in a hand-to-mouth existence on the part of the utility which would be conducive neither to public confidence nor efficient service.

Therefore it would seem that all we have said as to the necessity for ample depreciation reserves in the case of a new company applies with equal if not greater force to the case of an old company. In other words, an ample reserve for depreciation is an absolute necessity in the case of every public utility, whether new or old.

And it further seems to us that if mistakes have been made in the past by such utility, through a failure to set up proper depreciation reserves, the sooner such mistakes are corrected and the utility placed on a sound basis with respect to such reserves, the better it will be for all concerned.

But we do not think that such mistakes should be corrected wholly and all at once at the expense of the public, as is done where existing depreciation is ignored, and the stockholders permitted to earn upon the full undepreciated value of the property as found at the date of the valuation. This course has frequently been pursued by other commissions upon the theory that if the public has not paid for the depreciation which has come to pass and now exists, the public owes the bill and can best pay it by having the existing property valued for rate-making purposes at its full value. In itself this would not be a great injustice to the public, but it becomes an injustice when the public is then required to assume the burden of creating and maintaining from year to year the depreciation reserves which should have been created years before. For the reserve created in the future covers not only the depreciation which accrues in the future, but as well the past depreciation which will not become wholly manifest until some time in the more or less distant future.

Thus to make the public assume the burden of past or existing depreciation by valuing the property at its cost new, and at the same time require the public to create a reserve to take care of the existing as well as future deterioration of the property, would be to make the public pay the same debt twice. On the other hand to require the company to bear the whole burden of the existing deterioration, actual and theoretical, and make no provision to enable it to meet it when it matures by the retirement piece by piece of the entire property now in service, would be rather too severe a penalty to impose upon the utility for its more or less inadvertent failure to guard against such loss in the past.

In order to avoid all such injustice, both to the public and to the company, we have therefore concluded to determine in the first place how large a depreciation reserve the public should properly create and maintain. Having determined this question, which for the reasons above stated we feel to be fundamental and of prime importance, we will determine in due course the rate at which the public should be required to

build up such reserve, and the valuation which the property shall be given pending that process.

We believe such course will speedily result in placing this company's affairs upon a sound and just basis. The mistakes of the past can not all be corrected in a moment. If time, however, is taken for their correction, they can usually be so apportioned along lines of justice and equity that neither party will particularly feel the harm, and in the end both will be better off. The duty of a public service commission is, in our judgment, to build for the future, due regard being had, of course, to individual present rights.

Depreciation Reserves.

The company's witnesses in this case contended that it should be permitted to create in the immediate future and thereafter maintain depreciation reserves normally equal to from 20 to 25 per cent of its plant investment. We have carefully considered this contention both from the point of view of the company's probable requirements in the future, and its actual experience in the past. Our conclusion is that the public should be required to create depreciation reserves not normally exceeding 20 per cent of the plant investment as the same appears from time to time. After this reserve has been created, and the property in its entirety comes to be valued, it will be found that four-fifths of the same belongs to the stockholders and that one-fifth has been contributed by the public. This advance will have been made by the public as its guarantee that so far as it is concerned the company will at all times be in a position to make replacements of its property when and as they are required for efficient service. And the reserve of 20 per cent being created, and invested in additions to plant, the company would be entitled to earn upon 80 per cent of the total investment.

Of course it cannot be expected that a depreciation reserve of 20 per cent of the plant investment would remain at that precise percentage for any appreciable period of time, for the

very object and purposes of the reserve presupposes that it will fluctuate from month to month with the necessarily erratic drafts thereon for replacements. Therefore when we speak of a 20 per cent depreciation reserve we mean a reserve whose normal average maximum shall be approximately twenty per cent of the total plant investment.

One of the company's witnesses further contended that the size of the reserve to be required by a public utility is a question to be determined by its executive officers, and that for a public service commission to attempt to determine that question would be for it to usurp the functions of such executives. We see strong reason in this contention and believe it to be correct. Therefore it is that we say that the public shall not be required to create a reserve of over 20 per cent. If the executives of this company feel that a larger reserve is required for the proper administration of its affairs, they will be at liberty to create the same either out of surplus or out of money derived from outside sources, as they may elect.

By the term "plant investment" as used in this connection we mean the entire physical property, including land, buildings and rights of way as well as its equipment, exchange lines and toll lines. The books of the company show that the total depreciation reserves created by the public of Maryland amounted to $1,367,700 June 30, 1914. It will be seen subsequently that this amount is considerably less than 20 per cent of the amount which we find to be the fair value of the property.

The question of the rate at which the remainder of this reserve shall be created will be determined when we come to discuss the question of fair return.

Present Depreciated Value

We come now to the ascertainment of the present depreciated value of this company's property.

Counsel and witnesses for the company contended that these questions of depreciation reserves, the expense of depreciation

and existing depreciation had no connection, one with the other, that existing depreciation had to do only with the past, and that the expense of depreciation, depreciation reserves and their related accounts had to do only with the future.

With this contention we are unable to agree.

Rates are to be fixed for the future, not for the past. It is true that we are engaged in ascertaining the present fair value of this property in its depreciated condition, but the *rates* which we are to fix will be earned upon the fair value of that property as it may exist from time to time in the future. The property has already depreciated. It is depreciating today. It will depreciate still further tomorrow and each day in the future. Therefore were we to fix a rate based solely upon the fair value of the property today, the return from that rate would be too high when related to the diminished value of the property tomorrow.

The process of depreciation is not a thing which can be divided into separate epochs, and different principles for its determination applied to each. To the contrary, depreciation of physical property, like decay of any other kind, is a single process. It began in the past, it is going on in the present, and will continue to go on in the future. It is in fact a single process and should be so regarded.

And this is particularly true in a case involving the valuation of the property of a public utility for rate-making purposes.

In an ordinary case of bargain and sale, where the vendor is divested of the title to property and such titles vested in the vendee, the process of depreciation may well be regarded as divided into two periods, the past and the future. In such a case the actual, visible depreciation which the property has undergone in the past is the paramount factor for consideration. Likewise in a proceeding involving the exercise of the right of eminent domain. Present physical condition is the chief factor for consideration.

But in a case involving the fixing of rates the situation is different. In such a case there is no question (except in the

distant one of confiscation) of divesting the title of the owner and vesting it in another. The whole assumption is that the present owner of the property will continue indefinitely to own and use the same in the public service.

And, as we have seen, there is still an additional assumption which does not exist in a case of sale or condemnation, to wit: that the public for whose primary use the property is being used will at all times pay to keep that property in proper repair, and at the end of its life of usefulness will replace it with other property of equal value.

Surely, where property is held and used by a public utility upon such terms, the depreciation of that property must be regarded as a single and individual process.

These general conclusions can best be illustrated by concrete application to the contentions of the respective parties in this particular case.

The company contended that existing depreciation was to be determined solely with reference to the actual, present physical condition of the property as determined by inspection. Counsel for the People on the other hand contended that it must be measured by the ratio of the expired life in service to the original entire expectation of life as estimated by competent engineers.

The exhibits and evidence of the respective parties were based upon these entirely different theories.

Both agreed that under the accounting rules applicable to telephone companies, the true inquiry was the present quantity-of-service value of the property.

In Exhibit No. 30 prepared by the company's engineers, it appeared that no allowance on account of depreciation was made in the case of the company's land and rights of way. In the case of buildings, a careful examination was made by competent men to determine the cost of repairs necessary to be made in order to make such buildings as good as new. As to the plumbing, heating and elevator systems, estimates were made of the deterioration not susceptible of specific repair. It was found that the cost of these repairs, etc. would aggregate

4.87 per cent of the reproduction cost new of such buildings.

In Exhibit No. 89 prepared by the Commission's Superintendent of Investigation, the original life in service of these buildings was estimated at 50 years, this being the life of buildings of this class in the opinion of many engineers, and resulting in an annual rate of depreciation of 2 per cent. It was estimated that the buildings had been in service an average of 7.56 years, making a total depreciation of 15.12 per cent. of their reproduction cost new.

Reference to the company's Exhibit No. 107 shows that in determining the annual expense of depreciation for the purpose of creating and maintaining its depreciation reserves, the company's engineers estimate the life of its average buildings at 24 years, and that at the end of that period they will have a salvage value of 38 per cent. This results in an annual rate of depreciation of 2.6 per cent., and under the theory of counsel for the people, assuming the age of 7.56 years to be correct, the existing depreciation would be 19.656 per cent. of the reproduction cost new, as against the 4.87 per cent. estimated by the company's engineers.

If, now, we still assume the average age of the buildings to be 7.56 years, we find that during the greater part of this period the company has been collecting each year from the public 2.6 per cent. of the value of these buildings and putting it aside in a reserve designed at the end of 24 years from the average date of their erection to replace the same with other buildings of the same value. Thus we find the contention of the company to be that although it has collected from the public 19.66 per cent. of the cost of these buildings upon the theory that they have been depreciating in value at the rate of 2.6 per cent. a year, yet at the end of 7.56 years they have depreciated in the aggregate but 4.87 per cent. These figures are not exactly accurate, as the company has not in fact been collecting the reserves at this rate during the whole of the 7.56 years, and there is some doubt whether the actual average age of the buildings is exactly 7.56 years; but this is the principle to which we are asked to subscribe by the company's

counsel and witnesses in determining the depreciated value of its property.

It is hardly necessary to say that such contention is repugnant to the average man's sense of justice and right, and it is by this very contention and a close and analytical study of the refinements of reasoning by which its correctness is sought to be established that we are driven to the conclusion that the practical solution of this problem lies, as we have stated, in requiring the public to contribute in the first instance a depreciation reserve which will be ample to meet the replacement requirements of the company from time to time as they may exist, and which will relieve us from the necessity for all time to come of endeavoring to keep pace with the average age and probable life of each of the million individual pieces of property in this company's entire plant.

We will not go at length into the other details of these three very interesting exhibits. Suffice it to say that the same method of ascertaining existing depreciation by the inspection method is followed by the company to the extent of approximately $3,750,000 of its property. As to approximately $2,500,000 of the property the company's engineers base their estimate of existing depreciation upon the ratio of actual age in service to estimated entire life in service, the method adopted throughout by the Commission's Superintendent of the Investigation. As to the remainder of the property, or approximately $5,300,000 of the same, the company's witnesses confess their inability to estimate the existing depreciation by either of the above methods, and base their estimates solely upon their individual judgment as to the extent to which the property in question has actually deteriorated in the past.

The final result of the two Exhibits Nos. 89 and 90, is that the company equates the existing depreciation to 10.77 per cent of the reproduction cost new of the entire property, land and rights of way included, and the Commission's Superintendent of Investigation, by following the life-table method, equates it to 22.93 per cent.

Applied to the actual reproduction cost figures as determined by the Commission and hereinbefore set forth this difference was as follows:

Mr. Anderson	$2,993,856
Mr. Whittemore	1,406,789
Difference	$1,587,067

As has been seen, this large difference between these two engineers results simply and solely from the application of different theories to a given state of facts.

We have already said enough to show very clearly that we can not subscribe to the theory advanced by the company for the ascertainment of existing depreciation in the property of a public utility.

Any theory for ascertaining existing depreciation in the plant of a public utility which confines such depreciation solely to the actual, visible, physical, demonstrable deterioration which can be seen by the human eye and measured by the human hand, must of necessity ignore that other species of deterioration which the experience of the past has demonstrated beyond peradventure exists in the property of every telephone company, although it can not always be seen by the human eye or measured by the human hand.

We refer to that tendency upon the part of all such property to become inadequate or obsolete with the lapse of time. We find it in the case of practically every building which this company owns. Ample adequate today, they may become entirely inadequate tomorrow. Counsel for the Protective Telephone Association very aptly called our attention during his argument to an instance of this very kind in the case of the building in which the offices of this Commission are located. Some eleven years ago the proprietors of the Baltimore News built a handsome, expensive and modern seven-story building at the southeast corner of Fayette and Calvert Streets in Baltimore City. At the end of five years the building was virtually as good as new and would probably have lasted for fifty years longer. Upon inspection

it would no doubt have appeared that an expenditure of 10 per cent of its original cost would have made it absolutely as good as new. And yet at the end of about five years, the owners of this building found that they needed more extensive quarters. Meanwhile land at this point had advanced greatly in price. A seven-story building was out of place on such a site. Thereupon the former structure—still good for fifty years or more, but now both inadequate and in a sense obsolete—was torn down at practically a total loss, and an eighteen-story modern office building erected in its place.

This was but a single case. In itself it proves nothing. But what happened once in the case of this single building happens almost daily in the case of the plant of a great telephone company. Almost every day a pole is taken down which has not worn out from natural decay. But its usefulness in that particular place is gone, and it must be supplanted by a heavier or sounder pole. So often in fact have such things occurred in the case of this and other similar companies, that engineers have been able to compute with reasonable accuracy, the extent to which this species of replacement will take place from year to year. Life tables have been prepared showing the expected life of every article in the plant of a telephone company, and the experience of the past has shown these tables to be reasonably accurate. As experience shows otherwise, they are modified. Such tables perform the same relative function in the case of a telephone company as mortuary tables perform in the case of a life insurance company. They are the last expression of trained scientific thought on the subject based upon the experience of the past. They are the best evidence which science can afford as to what the future holds in store for the property of a telephone company.

As such they are used in determining what sum of money must be collected from the public each year over and above current operating expenses to meet this ever-recurring cost of property going out of service either through physical decay, inadequacy, obsolescene or other causes. And as such they

are brought to this Commission and urged upon it as a proper factor to be considered in determining what are in fact the net profits of the stockholders in the operation of their property.

For these reasons we feel that we would in no sense be justified in ignoring this scientific data as to the probable future life of this property, and saying that in determining its present value we will confine ourselves solely to the evidence of physical decay we find therein, and disregard entirely the company's own contention that such property contains inherently an equally large degree of latent deterioration which, although not visible today, will, as a scientific certainty, manifest itself tomorrow.

From the conclusions we have reached it would seem that we would naturally adopt Mr. Anderson's estimate of the existing depreciation, 22.97 per cent of the reproduction cost new. This, however, we cannot do. Mr. Anderson did the best he possibly could with the data in hand as to the average age of the company's investment, but we are by no means satisfied that his final conclusions in this respect are correct, although in the light of other facts before us we believe them to be approximately so in the final result.

On page 4 of Exhibit No. 89, Mr. Anderson equates the average estimated life of the company's entire plant and property to 19.08 years, by which he means that the entire value of the property at any time would be turned over in dollars once in 19.08 years, not that 19.08 years is the outside or even average life of each particular piece of property in the plant.

Mr. Whittemore, in his Exhibit No. 107, states that the company should have approximately 6.25 per cent of its plant investment annually in order to be at all times in a position to make plant replacements. This estimate would indicate an average [illegible]nt life of sixteen years.

The Wisconsin Railroad Commission, which has given this question close and careful study for many years, estimates that the annual average rate of depreciation in the case of a

telephone property is 8 per cent, indicating an average life of 12½ years.

The respondent company's tables for estimating the annual expense of depreciation follow closely the Wisconsin figures, and indicate an approximate plant life of about 12½ years.

In view of these facts this Commission feels that it would be reasonable and fair to all alike to assume for the purposes of this case that the average life of the company's plant now under investigation is sixteen years.

This point established, the question remains, what is the average age-in-service of the plant as we have it today?

Mr. Anderson, in Exhibit No. 89, estimates this average age of the entire plant at 4.36 years. The company's witnesses disclaimed all ability to give this Commission any idea of the average age-in-service of the plant.

Mr. Paine, a witness for the company, testified that the average age of the dollar invested in other similar telephone plants of the same group was five years, but that this did not necessarily mean that the average age of the plant itself was five years.

Reference to Chart XI on page 68 of the "Notes on Depreciation" filed by the Commission's Assistant General Counsel would seem to indicate an average age of the plant of between three and five years, certainly not less than three nor more than five.

We are aware of the fact that this property has always been kept up to a high level of efficiency, and feel that this fact should be given due consideration in any estimate of aggregate existing depreciation.

From these figures it would appear that under the theory which we have decided to be correct, the property in its entirety should properly be regarded as having depreciated for rate-making purposes somewhere from 18.7 per cent, if we assume an average age of three years, to 31.2 per cent if we assume an average age of five years, and an estimated life of sixteen years. We are of the opinion under all the circumstances that the average age of this property is slightly over three years, and it would therefore follow with an assumed estima-

ted life of sixteen years, that it had depreciated for rate-making purposes 20 per cent of its cost new.

The reproduction cost new value of the plant investment as of June 30, 1914, after the addition of construction overheads, was found to be $13,062,197. We hold that the present depreciated value of the company's property upon the basis of reproduction cost new is 80 per cent of this amount, or $10,449,758.

The company will be held entitled to earn upon this amount, plus such additions as we may make thereto for non-physical values and working capital. From this total will be deducted $100,000 erroneously included in the above figures on account of paving not actually done by the company.

Meanwhile the company will further be held entitled to set aside out of earnings from year to year a sum to be added to its present depreciation reserves until such time as said reserves amount normally to a maximum average of 20 per cent of the plant investment.

Ordinarily the company would not be permitted to earn upon the additional reserves so created. But inasmuch as we have already deducted this amount from the reproduction cost new of the property now in existence, as these additions are made to the reserves and new property purchased with the same, such new property should be added to the capital accounts, and the company be held at all times hereafter entitled to earn upon 80 per cent of the reproduction cost new of its physical property as it may exist from time to time, so long as such reserves are kept up normally to a maximum average of approximately 20 per cent.

The idea of this ruling is that inasmuch as the company has failed to set up in the past reserves sufficient to cover the depreciation which its property has undergone in the public service, it shall not for the present be permitted to earn upon anything more than the depreciated value of such property; but inasmuch further, as it does not clearly appear that the public has ever repaid the company for the full depreciation which we find to exist, the public should continue to do

as it has been doing since the depreciation reserves were set up by the company in 1907, and gradually wipe out this obligation. When this has been done and the depreciation reserves have reached a normal average level of 20 per cent of the plant investment, the public should be required to keep them up to approximately that average level.

Under the aforegoing conclusions we find that the depreciated value of the physical plant of the respondent company as of June 30, 1914, upon the reproduction cost new basis is as follows:

	Balto City	Md. Elsewhere	Total
Cost new	$6,760,080	$6,302,167	$13,062,197
Depreciation	1,353,806	1,258,633	2,612,439
Depreciated Value	$5,415,224	$5,084,534	$10,449,758

We do not feel, however, that we can dismiss this branch of the subject without adverting to the contention of counsel and witnesses for the respondent company to the effect that the existing depreciation reserves of the company have been set up at the expense of foregone dividends, and to the same effect, that whatever depreciation is now found to exist in this property has been more than absorbed by the deficits from operations in past years.

The question of deficits from operations will be discussed in due course in a subsequent portion of this opinion.

We wish at this time to state our views clearly as to the relative obligations of a public service corporation to the public with respect to setting up proper reserves to meet the accruing depreciation of its property, and to its stockholders with respect to the payment of dividends.

The depreciation of the property of a public utility, as we view it, is as much an expense and incident of operation as is the cost of labor or of fuel. We have quoted from the opinion of the Supreme Court of the United States in the Knoxville case to the effect that it is not only the right of the utility to exact this expense from the public as it accrues, but that it is also the duty of the utility to the public to do so, in order that

the latter may at all times be assured adequate service. In the same case that Court also emphatically declared that this expense came before any question of profit, and that any dividend declared before it had been provided for was unwarranted.

In the light of this opinion depreciation reserves, within their proper and necessary limits, can never be set up at the expense of dividends, any more than it could properly be claimed that a telephone company had paid the salaries of its operators at the expense of dividends. All operating expenses are at the expense of dividends in the sense that operating expenses must be paid ahead of dividends. But it is a great mistake to assume that stockholders of a public service corporation are enttiled to any particular credit for setting up proper depreciation reserves, or to any especial consideration when they have neglected to do so and have been apparently content with merely nominal dividends. Until such reserves were set up they were entitled to no dividends at all.

A dividend paid out of operating receipts at the expense of proper appropriations to offset the regularly accruing deterioration of the property and provide for its replacement when the time comes to retire it finally from service, is as much a dividend paid out of capital as though property of the utility had actually been taken out of service and sold for the express purpose of raising funds with which to pay such dividends.

To the extent that this failure to charge the public rates high enough to cover both the expense of depreciation and a fair return upon the investment was a necessary incident of the conduct of the business in its early stages, and may therefore be regarded as a part of the cost of establishing the business, and proper to be capitalized, an entirely different question is raised which will be considered at the proper time.

INTANGIBLES AND NON-PHYSICAL VALUES.

The accounting system prescribed by this Commission for the use of telephone companies recognizes the propriety of the capitalization of intangible or non-physical property by providing specific capital accounts in which such items are to be carried on the books of the utility.

These accounts are as follows: No. 201, Organization; No. 202, Franchises; No. 203, Patent Right, and No. 204, Other Intangible Capital.

It has repeatedly been held by the courts that when these intangible values have been shown to exist by satisfactory evidence they are property, and as such cannot properly be ignored in the fixing of rates even though the utility itself, for reasons which may seem sufficient to it, may not actually carry them upon its books or use them as a basis for capitalization.

In this case no claim is made on account of any patent rights.

Nor is any claim made on account of franchises as such, although the company claims a valuation of $1,210,872 on its easements in the streets of Baltimore City. The question of the valuation of such easements will be taken up in due course.

In addition the company claims unconditionally a further sum of $396,179 plus any depreciation of plant which might be found by the Commission as representing the cost of establishing business, organization and development, and deficits from operation.

A further claim of approximately $1,300,000 was made on account of the cost of money and expense of promotion, but it was stated by the company's counsel that this claim would not be pressed if, upon investigation, the Commission approved the existing arrangement under which 4½ per cent of the company's gross earnings are paid the American Telephone & Telegraph Company in return for the above and other services.

Thus we find that there are three entirely separate and distinct items of intangible values claimed by the company, first, easements; second, cost of money and of promotion, and, third, cost of establishing business, organization and development. These claims will be taken up in the order stated.

Easements.

The question of the propriety of valuing the easements of a utility in the public streets is one which has received considerable attention in this State.

In all the other states, so far as we are advised, rights in the nature of easements have been regarded merely as franchises, and the courts have almost universally held that they could not be capitalized for rate-making purposes on two grounds, first, that it would be unjust to require the public to pay a return upon property it had given the utility without cost to use in the public service, and which derived its only value from that use; and second, that the value of the easement must depend in its final analysis upon its revenue producing capacity, and inasmuch as the object of a rate-making proceeding is to determine the amount the company is entitled to receive from the public and reduce that amount if unreasonable, the amount could never be reduced if the revenue producing power of the easement were to be capitalized.

But in Maryland, easements in the public streets have been given a definite status as property by the decisions of our Court of Appeals. In the case of *Consolidated Gas Co. vs. Baltimore City*, 101 Md. 547, Chief Judge McSherry clearly distinguished between a *franchise*, which he declared to be a special privilege conferred by government upon individuals, and which does not necessarily involve an interest in land, and an *easement*, which he declared to be property, not a privilege, and to be essentially an interest in land. In this connection he said: "The right to occupy the streets with gas mains if a franchise * * * the actual occupation of them in that way pursuant to the franchise is the acquisition of an easement."

This distinction was subsequently recognized in the second *Gas Company Case*, 105 Md. 43, and in the case of *United Railways & Electric Co. vs. Baltimore City*, 111 Md. 264. In all these cases the right of the City of Baltimore to assess easements of this kind for taxation was recognized, and the revenue producing value of the same considered an important element in arriving at their value.

Finally in the second case of the *Consolidated Gas Company vs. Baltimore City*, Judge Stockbridge, now a member of the Court of Appeals, but at that time sitting in the Baltimore City Court, held that the proper method of arriving at the value of the Gas Company's easements for taxation was to value them on the basis of annual rental charges made at the time by Baltimore City to other utilities for somewhat similar easements. It seems that the Gas Company had acquired all its easements outright, and at the time of the inquiry, was paying no rent or other annual charge for the same. One of these other companies was paying an annual rental of 4¼ cents per lineal foot of its mains in the city streets, and the other, which happened to be the respondent company in this case, was paying seven cents per lineal foot of mains. After considering the relative character of the three uses, Judge Stockbridge determined that 5¾ cents per lineal foot would be a fair basis of valuation in the case of the Gas Company. This annual rental was thereupon capitalized and the company assessed accordingly. No appeal was taken from this decision and subsequent assessments of the Gas Company's easements have been upon this basis.

The question next arose in the case of the valuation of the property of the same Consolidated Gas Company for rate-making purposes by this Commission.

It was strenuously urged in that proceeding that, for the reasons above stated, it would be improper to value these easements for rate-making purposes. The question was thereupon referred by the Commission to its General-Counsel, who filed a written opinion holding that easements were property, and as such should be valued for rate-making purposes, but

gave no intimation as to what method should be adopted for their valuation. The Commission acquiesced in the opinion of their General Counsel and valued these easements at $5,000,000, the assessed value placed upon them by the Appeal Tax Court of Baltimore City for purposes of taxation. This addition brought the fair value of the Company's property, as determined by the Commission, up to $26,417,414. But the bonds of the company, original and guaranteed, amounted to $29,358,000, and in view of the provision of the Public Service Commission Law of this State requiring the Commission in making valuations so far as possible not to disturb the value of any bonds issued prior to the enactment of the law, the bonded indebtedness was taken as the basis upon which to compute returns.

In the case now before us People's Counsel conceded that the easements of the respondent company were property and as such entitled to be considered in arriving at the final valuation of the property for rate-making purposes. But he contended that the easements of the company in this particular case were subject to an annual rental charge which absorbed their full capitalized value and that such easements not being shown to be worth anything more than the rent paid for them, the company had no such equity in them as was shown to exist in the case of the Gas Company's easements and consequently they had no demonstrable value aside from their productive value. Upon this latter point he contended that their productive value could not be segregated from the productive value of the remainder of the company's property, and that consequently the only consideration which could properly be given them in this proceeding would be that to which the earning value of the property would be entitled in arriving at its fair value in its entirety.

Counsel for the Protective Telephone Association likewise contended that no value had been shown for the particular easements here in question, and that the Commission would not be justified in resorting to mere conjecture in order t give them a substantial value.

The valuation of the easements contended for by the company was presented by Mr. Frank J. Caughy, a real estate expert of Baltimore City who had participated in the valuation of the easements of the Consolidated Gas Company for taxation.

Mr. Caughy divided the easements of the company into two classes, conduit and pole lines.

It seems that by Ordinance No. 41 approved May 9, 1889, the respondent company was granted the right to make use of the streets of Baltimore City for the laying of its conduits upon signing an agreement to pay annually the sum of 30 cents for each lineal yard for the first four miles of conduit, and 20 cents per lineal yard for each succeeding mile or fraction of a mile, provided not less than $3,000 should be paid in any one year. The ordinance also provided that the company should provide duct space in its conduits for the City fire alarm and police systems without charge, and also remove its poles from the streets as the conduits were laid. This ordinance was subsequently ratified by an Act of the Legislature passed in 1892 and was construed by the Court of Appeals of Maryland to be a valid contract not subject to repeal or modification by the City.

Under this contract the respondent company laid 202,865 lineal yards of conduit.

Mr. Caughy's theory was that the price fixed by the City for this privilege at the date of the passage of the ordinance in 1889, was considered by the City a fair and reasonable charge for the use of the land under the surface of the streets at that time, and that consequently, as there has since been an enhancement in general land values throughout the City the respondent company is entitled to have its easements regarded as having similarly enhanced in value. Applying this theory, he estimated the value of all the land in Baltimore City in 1889 to have been $91,661,875.20, and that in 1913 the value of the same area was $163,398,259.00, or an increase in land values of 81 per cent. Taking the rental of

all the conduits at a flat 20 cents, it followed that under his theory, the present value of the right was 36.2 cents a yard or an increase of 16.2 cents a yard over the actual rental paid. Applying this figure to the 202,865 yards now in use, he found an equity worth annually $32,864. This sum he capitalized at 4.36 per cent the average price paid by the City for money, and got an easement value of $753,764.

In the case of the pole lines, Mr. Caughy adopted a different theory. At the present time all telephone lines above the surface in Baltimore City are assessed for taxation at 7 cents per lineal foot. Under an ordinance passed in 1893 an annual tax of $2.00 per pole was imposed on all telegraph and telephone companies operating in Baltimore City. Allowing 120 feet between poles, this would reduce to 1.66 cents per lineal foot. Mr. Caughy regards this 1.66 cents annual tax as a lien upon the property, deducts it from the assessed value of 7 cents, and gets what he terms an equity of 5.33 cents per lineal foot, or an income of $19,929.93 on the 373,920 feet of line. This sum capitalized at 4.36 per cent gives an easement value of $457,108 in the case of the pole lines.

The total of the two is $1,210,872, which he claims to be the fair value of the company's easements of all kinds in the streets of Baltimore City.

It is obvious that this Commission could not adopt either of Mr. Caughy's theories for the valuation of these particular easements.

It will be noted that in the case of the pole line easements Mr. Caughy takes the assessment of the Appeal Tax Court of Baltimore City as the basis of his valuation, reducing it by the amount of the pole tax which the company is required to pay and referring to this tax as a *lien* upon the property. Reference to page 82 of the brief filed by counsel for the respondent company shows that this assessment of 7 cents per foot of pole line easement was agreed upon by counsel for the City and the company in 1909 by way of a compromise of pending litigation upon the subject, and with the express understanding that the conduit easements would not be taxed independ-

ently of the 20 cents per yard charge above referred to. The evidence also shows that in a large part of the city not covered by the conduits of the company the City has conduits of its own with duct space for rent, and in these sections it is not permissible to erect any new poles, so that as the existing pole lines decay the wires are required to be put underground. In view of these facts, it is reasonable to presume that the above compromise as to the tax on the pole line easements was arrived at very largely upon the assumption that the existing pole lines would gradually be abandoned and the wires placed underground. Under such circumstances it would certainly not seem just to capitalize the annual tax now paid upon such easements upon the assumption that they would be perpetual

In addition the evidence shows that if the respondent or any other telephone company desired to get a permit to plant poles in any of the sections where pole lines are permitted, it could get the same by paying for the privilege at the rate of $2.00 per pole, the price paid by the respondent company for the privilege it now enjoys.

That the assessed value of property for taxation cannot be taken to govern its valuation for rate making purposes has been recognized by the Supreme Court of the United States in the case of *Willcox vs. Consolidated Gas Co.* of N. Y. 212 U. S. 19.

If it were shown that these easements partook of any particular characteristics distinguishing them from other easements of like character, which could be obtained by any telephone or telegraph company upon paying the pole tax of $2.00 per year, such for instance as was shown in the Gas Company case where the company owned outright easements similar to those owned by others upon which an annual rental had to be paid, or if it were shown that the particular easements here involved had a market or other definite value as such, we should feel it incumbent to place a specific, definite monetary value upon them, independently of the important part they undoubtedly play in making up the productive value of the

property in its entirety. But no such independent value has been shown, and in our opinion, none exists.

Unquestionably their productive value is to be considered and given due weight, but the productive value of each of the several integral parts of a complete telephone plant cannot in the aggregate equal a sum greater than the productive value of the whole, and, therefore, in view of the nature of the inquiry in which we are engaged, it would seem both unnecessary and illogical to attempt to make a separate valuation of these particular easements at this time on the basis of their productive value alone. The taxing authorities might well find it necessary and advisable to make some such inquiry, as they would be engaged in valuing only this one particular kind of property in one particular subdivision of the State, but we are engaged in a task of an entirely different character. Our problem is to value the whole property of the company in the entire State of Maryland, and as we have seen in our discussion of the general principles governing the valuation of property for rate-making purposes, the productive value of such property, or its earning capacity as we may choose to term it, is but one of the many elements or evidences of value which must be given due consideration in reaching our final conclusions as to the fair value of this company's property in its entirety.

Mr. Caughy's theory as to the valuation of the conduit easements is obviously erroneous in several particulars.

In the first place he confuses the franchise with the easement, despite Chief Judge McSherry's clear distinction between the two. The ordinance of 1889 was a franchise. It empowered the respondent company to use the streets for its conduits upon certain terms. But the easement did not come into existence until those terms were availed of and the conduits actually laid in the city streets. Mr. Caughy now finds, under his theory of enhanced land values, that this privilege is worth 36.2 cents per yard, whereas the company gets it under the ordinance at 20 cents. But clearly, if that be true,

the company's bargain, and consequent equity, is in the franchise and not in the easement.

It has not been sought to have this franchise valued in this proceeding, probably because of section 34 of our Public Service Commission Law which prohibits the capitalization of franchises beyond the amount actually paid the State or City therefor. But even were this attempted, it is questionable whether Mr. Caughy's theory would hold. For his assumption was that when this ordinance was passed in 1889 it was based upon the then existing values of land in the city. To us it would seem far more reasonable to assume that when the city made this agreement for the future occupation of its streets by the respondent company at the rate of 20 cents per yard of conduit to be laid and paid for in the future, it had in mind what that right would be worth in the future as well as what it was worth at the date of the agreement.

And again, Mr. Caughy's theory that the value of an easement depends upon the value of lands generally in the city is in itself open to several objections. In the second Gas Company case Mr. Caughy attempted to establish the value of his client's easements by reference to the value of contiguous lands, but the Court of Appeals held that the property being devoted to a special and particular use, the general market value of other property was not a criterion for establishing the value of the easement. Moreover, however dependent upon the value of the land the cost of the original acquisition of an easement might be, it could hardly be contended that its subsequent value fluctuated with the value of the servient estate. For the value of an easement depends upon the use which is made of it. An easement of way over a diamond mine is worth no more than an easement of way over a barren waste, other things being equal.

It was contended during the argument that the decision in the *Minnesota Rate Cases* was authority for the proposition that the value of an easement enhanced with the market values of adjacent lands. That case involved the valuation of railroad rights of way, rights just a little more exclusive than any

other property rights known to the law. The easement we are now discussing does not involve an exclusive right of way over the property of another, and is in no sense comparable to a railroad right-of-way. The conduit easement is a subsurface easement in a strip of land in and over which the public has an easement for all the uses of a city street. It does not interfere, except under special circumstances of conduit installation and repair, with the right of public travel over the street, and is exclusive only in the sense that it precludes the City granting other rights in the same space to anyone else. In this sense it is analogous to the case of one railroad company crossing the right-of-way of another, a telephone or telegraph company acquiring a right-of-way, a bridge over a public highd the like. Counsel for the People, in the argument of this case, cited a long line of authorities to the effect that in all these cases the value of the second easement was to be measured by the extent to which its exercise might interfere with the original easement. He also cited a number of other cases involving the destruction or taking of rights of way or easements, in all of which the measure of value was held to be the damage to the productive use or value of the right taken, injured or destroyed. In none of these cases was the market value of the subjacent or adjacent land considered as the measure of value of the easement or right in question.

Applying these principles to the case of an easement for telephone conduits in a city street, we find first that this easement is not a general one, but is a qualified one in that it is limited to a particular use. Its value to the owner lies solely in its productive or usable value. That value, it is true, might in some cases be measured by the cost of acquiring a similar easement to take its place, or in some other case by the loss and damage sustained by the owner being deprived of its use. But where the question is not one of depriving the owner of the use of the easement, but the whole inquiry is based upon the assumption that it will continue to be used indefinitely just as it is now used, it would seem illogical in the extreme in determining that value to resort to hypotheses which we know

do not exist. Consequently we are driven to the conclusion that in a rate-making case, at least, the measure of the value of the easement is to be found in its worth to the company, its productive value, or earning capacity, however we may express the idea of worth.

In this instance, just as in the case of the pole-line easements, if there were any evidence of any independent value separate and distinct from their productive value, we would gladly consider it, as we realize that the mere difficulty of finding a measure for the valuation of property is no sufficient reason for declaring it valueless, if in fact it has value. But on the other hand the failure to find a measure for their valuation would not justify us in giving them a value which in our judgment would be wholly conjectural and speculative, and unwarranted by the facts before us.

In this case we are precluded from following the course laid down by Judge Stockbridge in the Gas Company case above referred to for the reason that in the Gas Company case the company had valuable easements in the city streets subject to no rental whatsoever, but similar to other easements for which annual rentals were charged. Obviously in that case, the charges made for other similar easements could be used as a guide for the valuation of those for which no charge was made.

But in this case, as we have seen, an annual charge is made for the use of these easements, and there is no evidence to show that the City is today charging anyone else any more for similar easements than is charged the respondent company under the ordinance of 1889. Hence it would seem that the respondent company is paying for its easements all they are reasonably worth, and the annual rental absorbs the capitalization of the rent. In this respect the situation is exactly analogous to that of a tenant who is paying a full measure of rent for property and consequently can find no one who will purchase his lease.

Promoters' Remuneration and Cost of Money.

Our difficulty in considering these items on the basis of actual cost to the company, lies in the fact that whatever monies were ever paid out for promotion and securing funds, have long since been absorbed in one way or another through the company's operating or other accounts, and have thus either been paid by the public or by the stockholders at the expense of dividends. Certain it is that no such capital accounts have been kept on the books of the company, and that if we were now to attempt to set them up it would have to be done altogether upon the basis of conjecture.

It is for this reason no doubt that the claim has been advanced by the company solely upon the theory that such allowances are proper in any estimate of the cost of reproducing the property of the company as it now exists.

Upon such theory, many commissions and courts have held such allowances to be entirely proper, since they realize that it is the experience of practically all business enterprises on a large scale that the cost of promotion is a very real and substantial item of expense, and that no enterprise, certainly no newly established one, can obtain money for its necessary purposes without substantial cost either by way of brokers' commissions and fees, or a discount where the money is raised by the sale of stocks and bonds. More frequently it is found that both of these items of expense are encountered, not only in the case of new companies, but of old ones as well.

The evidence before us in this case upon these two points is conclusively in favor of such allowances where a valuation is made upon the basis of reproduction cost in the case of an ordinary company, or where such reproduction cost must be considered in arriving at a final conclusion as to fair value.

The company claims 5 per cent upon the reproduction cost new value of its property as the cost of promotion, and a second 5 per cent as the cost of securing the money used in its construction work.

Were these allowances to be made in this case, it is seen that they would amount to approximately $1,300,000. The in-

terest on this sum would be $78,000 per year on the basis of 6 per cent, $91,000 on the basis of 7 per cent and $104,000 on the basis of 8 per cent.

In this case there are peculiar reasons, not applicable to ordinary companies, why these claims should not be allowed.

The testimony of Mr. Frank H. Bethell, President of the respondent company, beginning at page 3,042 of the record, shows that the Chesapeake and Potomac Telephone Company of Baltimore City, the respondent herein, is a part of what is known as the Bell Telephone System, the operations of which extend throughout the United States and cover as well a part of Canada. The United States is divided into eight groups of these associated companies, the New England group, the Eastern group (including the respondent company and also the Bell Telephone Company of Pennsylvania, the Central District Telephone Company, the Delaware and Atlantic Telegraph and Telephone Company and others), the Central group covering Chicago, and the Middle West, the Southwestern group, covering Missouri, Arkansas, Oklahoma and Texas, the Mountain group with headquarters at Denver, the Pacific group covering California and the other states on the Pacific coast, the Northwestern group with headquarters at Omaha, and the Southern group covering the southern states east of the Mississippi River.

The parent company of these several groups as well as of the Canadian companies, is the American Telephone and Telegraph Company which holds the bulk of the stock of the associated companies in some instances all of it—and while it operates no local exchanges itself, operates toll lines covering the entire country and connecting with the exchanges of all the associated companies.

In addition to operating these toll lines and holding the stock of the smaller associated companies, the American Telephone and Telegraph Company owns the Western Electric Company, which is a large corporation engaged in the manufacture and sale of telephone supplies and equipment of all kinds with warehouses and branch offices scattered all over the

country. It was discovered early in the history of the organization of the Bell System that equipment should be standardized, and there should be one place at which all the associated companies should be able to get at all times the precise equipment they required. It was also found that a great saving could be made in the aggregate by having this company act as the general purchasing agent of all the associated companies, Mr. Bethell citing an instance of a saving of over a million and a quarter dollars in the printing of telephone directories by this method of collective bargaining.

He further explained that the first function of the parent company in the case of a new company was to organize it, finance it, put it on its feet, start it in the business, protect it in its needs, give it the benefit of its credit in the purchasing of supplies and equipment, and even furnish it the cash where such was needed in its operations. At this point it will be seen that the parent company really bears the original cost of organization, promotion and financing.

At later stages in the new company's existence this protection is continued, so that even after the company becomes fully established and is making money, the parent company furnishes it funds for any extensions of services it may find it necessary to make. All such funds, both in the earlier and later stages of the company's growth are furnished it by the parent company at par. In many cases only the notes of the company are required, in which case they are taken at par. An instance of this was given in connection with the Baltimore fire of 1904 when property of the local company running into the millions was destroyed almost overnight. Mr. Bethell went to New York repeatedly until he had brought down nearly eight million of dollars to be used in rehabilitating the plant. All this money was furnished by the American Telephone and Telegraph Company in exchange for notes drawing interest at 6 per cent, without one cent of discount and with no security whatsoever.

In addition to financing the associated companies in this way, the parent company protects them in the use of all pat-

ents used by any of them, defending all suits for infringement at its own cost and expense, as well as purchasing valuable patents for the use of all the companies. It also maintains at its own expense an engineering force of some four or five hundred experts who design and create new equipment, such as switchboards and the like. The switchboard for instance, is designed with all its parts, and the parts are made, assembled and tested, whereupon it is delivered to the associated companies as a finished product embodying the best engineering skill and experience available anywhere in the world. The parent company is now experimenting with an automatic switchboard through which an incoming call, when coming to a busy operator, will travel along the back of the switchboard automatically until it reaches one who is not engaged, when the connection can be made and the call completed.

This work of experimentation at the cost of the parent company permeates every line of the telephone business. It extends to conduits, cables, instruments, transmitters and receivers. It goes to building construction, even to matters of saving insurance through the reduction of fire-hazards. It also goes into the commercial and by devising methods for the better and more satisfactory ways of handling business to the satisfaction of the subscribers and at less cost to the company.

In other forms the activities of the parent company extend to matters of accounting in its many branches, and as well to a large and highly trained legal department, the services of which are at all times free to the associated companies. In addition the associated companies get the general benefit of the executive department of the parent company, a service the value of which it would be difficult to estimate.

The parent company owns all the telephone sets in use by the subscribers of the associated companies — the receivers, transmitters and cord attached thereto—it having been realized that uniformity of service was required throughout the entire system, and that this could not always be obtained if the associated companies were required to make extensive

changes in equipment at their own expense. These instruments are all kept in repair at the expense of the parent company.

The above is only a very general statement of the relations between the American Telephone and Telegraph Company and its subsidiary companies, but it will give some idea of the intricacy of those relations and of their value to the associated companies, and through them to the public at large.

As it now exists this arrangement is the outgrowth of many years experience. Originally the parent company rented the telephone instruments at a fixed rental, but with the development of the service and multitudinous changes in its character due to the improvement in facilities and rapid growth in the general use of the telephone, it was found better to lease the instruments as a part of the general service furnished by the parent company to the subsidiary companies.

Consequently in or about 1902 the plan was inaugurated of the parent company charging the subsidiary companies 4½ per cent of their gross telephone earnings in return for the lease of such instruments and rendition of the manifold services above referred to. At that time this charge equated to about $5.00 per telephone. At the present time it equates to about $1.62 per telephone. Mr. Bethell testified that about 80 cents of this amount represented the fair cost of the telephone instrument itself, including rental and repairs, and the remainder the value of the other services rendered by the parent company.

From the aforegoing it will be seen that the entire cost of promoting the respondent company and furnishing it funds for its necessary corporate purposes has been borne by the American Telephone and Telegraph Company under the above arrangement, or the somewhat equivalent arrangement which preceded the one now in force.

It was for this reason that counsel for the company in presenting its claims for the allowance of 5 per cent of reproduction cost new on account of promotion and 5 per cent on ac-

count of the cost of money, stated that it was conditional upon the continuance of such arrangement in future.

The evidence shows that the 4½ per cent payment by this company for the year ending June 30, 1914, amounted to $145,075 about one-half of which, or $72,537, would represent a fair rental for the instruments furnished by the parent company, and a like sum, the cost of the general services above referred to.

As such general services embrace the cost of promotion and furnishing money at par, it will therefore be seen that the respondent company got from the parent company in return for these annual payments, the largest of which was but $72,537 these two things which would have cost it $1,300,000 if it had been obliged to pay for them itself, and that the interest on this sum would have been certainly not less than $78,000, even upon the basis of 6 per cent.

In either event, the public pays the bill. If the 4½ per cent arrangement be continued the public will pay the bill as an operating expense of the company. If it be discontinued and the $1,300,000 capitalized, the public would have to pay the bill in the shape of a return upon the investment. If that return were made 6 per cent, the public would pay $78,000 as against the $72,000 paid under the 4½ per cent arrangement. If 7 per cent, the public would pay $91,000 as against the $72,000. And if 8 per cent, the public would pay $104,000.

But despite these facts, we are not prepared to concede the contention of counsel for the company so far as to enter into any express or implied understanding that in consideration of the waiver of this claim of $1,300,000, this Commission will approve the continuance of the 4½ per cent arrangement for all time in the future.

While this Commission feels that such arrangement is unquestionably a desirable one from the standpoint of the public, and that the mere fact that the parent company holds all the stock of the local company would not justify the disallowance of this $1,300,000 upon the reproduction cost theory, we do not

feel that it is necessary or would be advisable upon our part to take any definite stand relative thereto which might in any way embarrass ourselves or our successors in office in exercising jurisdiction over this company in future.

We have seen that this arrangement has been in force since 1902, and that prior to that date another practically equivalent arrangement was in force. The evidence in this case shows conclusively that the great bulk in value of the company's property has been installed since 1902, allowance being made for intermediate renewals from time to time. Hence it is clear that almost if not quite all the money used in the construction of the plant as we now find it has been furnished by the parent company under this arrangement. The promotion costs referred to by the witnesses do not refer merely to the cost of promotion incurred way back in 1882 when the local company was first organized. Mr. Paine made this quite clear. The promotion cost is a continuing cost and continues throughout the life of any business enterprise. Otherwise the 5 per cent would not have been claimed on the $1,300,000.00 present investment. Hence these promotion costs have likewise been met by the parent company under said arrangement.

Aside from any question of deficits, which will be considered hereafter, this 4½ per cent has been paid by the public of the State of Maryland as an operating expense. It therefore follows that if there is any equity at all in this claim of $1,300,000 now made, it fairly belongs to the public of the State of Maryland and not to the stockholders of the company. If now capitalized it would have to be capitalized in favor of the public which has paid it, and would stand as a reserve contributed by the public and offsetting any claim which the company could reasonably make to a return upon the same.

But for our purposes in arriving at the fair value of the company's property for rate-making purposes we think it best not to complicate the situation by allowing the claim and setting off against it such reserve, since the net result would be nil.

We have already expressed our views as to the propriety of the 4½ per cent arrangement. Under conditions as they now exist, we believe it to be an arrangement of great value to the public of this State.

Therefore in estimating the returns which the respondent company may reasonably be expected to receive upon the valuation hereinafter reached, we will consider this 4½ per cent a proper operating expense.

Meanwhile, for the reasons above stated, we will disallow the claim of $1,300,000 as the cost of promotion and of securing money.

Cost of Establishing the Business—Going Value—Development Cost.

These several terms—Cost of establishing the business, going value and development cost—have been used interchangably throughout this investigation. They are all intended to express that added value which enures to a plant as a going concern over and above the sum of the value of its component parts viewed independently of the whole.

To illustrate by reference to the plant and property here in question. Assume that all the land has been purchased, the buildings erected, the equipment in place, and the exchange and toll lines completed.

It is obvious that such a property, at a moment of such a sale as we have imagined, would have no established business, no good will and would in no sense be a going concern or have what we refer to as "going value."

To make it in truth a "going concern" it would be necessary to organize and train a force of men and women to operate and maintain the plant. Another force would have to be organized to go out and get patrons. Another force would have to be organized and maintained to handle the commercial end of the business. All these expenditures might properly be termed the "cost of establishing the business." They all mean the expenditure of real money and they are all commonly

recognized as necessary in building up any business, public or private. But these expenditures do not cease with the original starting of the enterprise. They are continuous throughout its entire life. As the business begins to grow, more men and women are necessary to operate and maintain the plant, more men must be employed to go out and get more patrons, more men must be employed to organize and maintain the commercial end of the business, and all these expenditures must go on at a constantly increasing rate until finally the business is on a substantial and successful basis. And even then such expenditures must be continued in order to keep it on such basis. This, then is what we mean by the terms "cost of establishing the business" or "development cost," and the value which comes into the plant in its entirety by such expenditures is what is usually meant when we use the expression "going value" or "going concern value."

Counsel for the People in this case conceded that some substantial allowance on account of "going value" must be made under the decisions of our highest courts, which are practically a unit to that effect. And in this connection he contended that inasmuch as there was no definite evidence before this commission as to what the cost of establishing the business was, an allowance not to exceed $500,000 should be made to cover both this item and any possible independent value which might be attributed to the company's easements.

Counsel for the Protective Telephone Association concurred in this general proposition, but confined their remarks to the company's property in Baltimore City, contending that a valuation of from $350,000 to $400,000 for intangible values of every kind, easements included, would be liberal in the case of Baltimore City.

Counsel and witnesses for the company on the other hand, contended for a valuation of the easements of $1,210,872 as hereinbefore shown, and an independent "going value" of $1,872,193, this latter sum being made up in part by estimates of the actual cost of organization and attaching the business, but in greater part by estimates of deficits from oper-

ation during the earlier years of the company. There were three theories advanced for the computation of "development cost" or "going value."

1. The reproduction cost method, being a modification of what is commonly known as the "Alvord Method."

2. The historical method, commonly known as the "Wisconsin Method," for the reason that it was first applied and has since frequently been followed by the Railroad Commission of that State, and

3. The percentage method, which involves fixing going value by a definite percentage of the structural cost of the property being appraised.

Both the company's witnesses and the Commission's Superintendent of Investigation submitted computations based upon the first, or reproduction cost, method. The witnesses in both cases assumed that the business could be established in a period of five years, and that during this period the company would not wait until its physical properties were entirely completed, but would get complete sections thereof in operation as soon as practicable in order to have a revenue coming in.

In these estimates the work was conceived of as progressing in quarterly periods. To the amount expended during the first quarter was added a sum representing the interest or return thereon, together with various other sums representing the estimated cost of organization, development, selling service, operation, etc. From the total was deducted the estimated amount of revenues received from operations, this yielding a deficit in the earlier quarters, and such deficit being added to the capital expenditures during the ensuing quarter; whereupon the same process was gone over again through each quarter to the end of the term, deficits from operation or return being consistently added to capital expenditures. This course resulted in the end in having figures for organization

and development, selling service and deficits, which in the case of Mr. Anderson amounted in the aggregate to $182,846 upon the assumption that the company would have been entitled to a 6 per cent return during the construction period, and $833,387 upon the assumption of an 8 per cent return. Mr. Whittemore's estimate was upon the assumption of an 8 per cent return, and his corresponding figure for these intangibles, including deficits from operation, was $1,872,193 the difference being due to different figures used in estimating the expense of organization, selling service, etc., and to different assumptions as to the progress of construction during the five-year period.

In the case of the computations based on the "historical" or "Wisconsin Method," much the same general thory was followed, except that in this case resort was had to the books of the company since its inception, and efforts made to recast the same to show the actual net earnings and losses each year. Where a deficit occurred it was promptly capitalized by being placed in the capital column for the ensuing year and interest computed on the same. As a result, working upon the assumption that the company was entitled to a return of 6 per cent upon its investment since it started operations in 1883, Mr. Anderson found that the deficit aggregated $850,569.

Working from the same books, but making different apportionments, Mr. Whittemore found that upon a 6 per cent basis of returns, the deficits aggregated $5,497,306.79, and upon an 8 per cent basis, $15,071,834.55.

One very obvious fallacy in the results shown by this method lay in the fact that both engineers started with the company's book value of $2,710,843 on August 1, 1883, the evidence showing that such book value was the mere nominal values of the stock issues of the two companies merged at that time, and there being no evidence adduced to show that such book values fairly represented the actual value of the property at the date of such merger. As was pertinently pointed out on pages 34-35 of the brief of counsel for the Protective Telephone Association, an error of $100,000 in the original valua-

tion in 1883, when compounded at 6 per cent until 1914, would amount to $608,805, and if compounded at 8 per cent would amount to $1,006,800.

But aside from this objection, which was applicable more particularly to the second or historical method, and only in a minor degree to the first or reproduction cost method, it will be seen that both these methods are open to the objection that they are based upon the double assumption that the company was entitled at all hazards to a return of 6, 7 or 8 per cent as the case may be, whether it earned it or not, and that in charging the rates for service which it did actually charge it was getting from the public the highest price for its service obtainable. In short, however, much might be said in favor of the general proposition, that early deficits from operation are under some circumstances a necessary and inevitable incident in the life of every newly established enterprise, the effect of capitalizing such deficits upon any such assumptions as the above, is to make the public of the present and the future pay both for the concessions of the company to the public of the past, as well as for any mistakes of management which may have been committed in the past.

In this particular case the historical method is open to the further objection that the company's books have been kept in the past in the method described in the portion of this opinion dealing with the subject of depreciation, and it would be unjust to the public in the extreme to capitalize deficits upon the showing made by such books.

In addition, the historical method is open to the now more or less threadbare objection that by its adoption the more money a public utility has lost in the past, the more valuable its property is today.

The reproduction cost method is open to the very serious objection that so far as the estimates and deficits are concerned, it is based entirely upon a main assumption of conditions which we know did not exist in fact and which might well yield entirely different results from those which the actual conditions would have yielded, to wit: that the entire

plant was constructed and business built up within the relatively short period of five years, when we know it has been the growth of over thirty years. To this extent the results achieved by the adoption of this method are hypothetical and conjectural, and a public service commission would hardly seem justified in accepting them as final in the absence of strong corroborating circumstances.

In this case we find no such corroborating circumstances, but in fact strong evidence to the contrary.

The table contained on page 36 of the brief of People's Counsel on the subject of intangibles shows the dividends actually paid by the respondent company and its predecessor, the Chesapeake and Potomac Telephone Company (of N. Y.) from 1883 down to 1914. It appears from this table that in nearly every year during this period the stockholders have received dividends ranging from 2 to 8 per cent. The table moreover shows that in practically every one of these years there were earnings materially in excess of the dividends declared, and the natural presumption is that these additional earnings were in part, at least, invested in plant.

It will be seen that the claim of the company on account of going value, may roughly be divided into two fairly distinct and separate branches, first, a claim for the actual cost of organization, securing customers and building up the business, and, second, a claim for any deficiency in a fair return suffered by the stockholders during the period of the company's early growth.

As to the first, this Commission is of the opinion that wherever it is made to appear by satisfactory evidence that there has been an actual cash outlay for organization, securing customers and building up the business, and it does not at the same time appear by equally satisfactory evidence that such outlay has been repaid the stockholders out of current earnings, the latter are entitled to have an allowance made for such expenditures and added to the value of the physical property to form a basis for the calculation of subsequent earnings, the amount of such allowance to be determined in the

sound judgment and discretion of the Commission under all the circumstances of the case.

As to the second, we feel that the burden should properly be shifted in view of the difficulties in the way of satisfactorily attributing deficits to any particular cause for which the public should be held responsible. In the case of organization, etc., we know that the expense was actually incurred, and in the absence of definite proof as to the amount, we can estimate the same at least approximately by reference to the known cost of such items in the recent past or in other lines of business. Consequently, starting with the known fact that the cost has been incurred, and estimating that cost by actual experience or other relatively definite data, it would, subject to the above conditions, seem only fair, before disallowing it, to require satisfactory evidence that it had been repaid by the public. But in the case of deficits the situation is entirely reversed, although as a purely abstract proposition, there is much that might well be said in favor of the capitalization of deficits.

Every man of any business experience at all must realize that with comparatively rare exceptions, no great business enterprise can be started and brought to success without some losses in its early stages. In private business these losses, in the case of a business which eventually reaches success are recouped from subsequent earnings over and above the normal rate of interest upon secured investments.

But in the case of a public service corporation, or an individual engaged in the public service, the situation is different. The capital has been invested, the business started, the early losses incurred, and then, when the proprietor is about to reap the benefit of success and recoup such losses, the State steps in and tells him that all he can rightfully exact from the public is a fair and reasonable return upon his investment, the precise rate depending largely upon the future, rather than the past, hazards of the enterprise.

How then, is the proprietor of such enterprise going to recoup such early losses? Obviously the answer is that if the

State is going to take this position and the proprietor has not previously recouped such losses, the State should regard them as one of the incidents of the cost of establishing the business and, capitalising them, permit the owner thereafter to earn upon the same.

But it is equally obvious that if it is not positively known that such early losses were in fact sustained, or have not subsequently been recouped, it would be unjust to the public to permit their capitalisation. Likewise would it be unjust to permit the capitalisation of such early losses in the absence of satisfactory evidence that they were a necessary incident of the business and not due to improper or unwise management, or to a failure to charge the prices for the service which could reasonably have been charged.

In this case, having no evidence before us which convinces us to our satisfaction that any particular sum has been lost by this particular company under circumstances which would justify its capitalisation, we do not feel that we would be justified in so assuming and capitalising any specific deficits as such.

We may well believe that the stockholders of this company lost money in the early stages of its development. In all probability they lost in actual operating expenses. It is even more probable that they were obliged to go without full dividends upon their investment for long periods of time. Their books show conclusively that the actual dividends declared in the early history of the original company were seldom over five per cent and more frequently only two, three and four per cent. But the books do not show definitely that the dividends so declared were the *only* earnings during this period. To the contrary they indicate that the actual earnings were considerably in excess of such dividends, and as such went into the plant investment. Nor do they show with precision how much of the plant investment was contributed from outside sources, or how much or how little created out of what was nominally operating expense. This entire realm is almost wholly one of speculation and conjecture. And yet the theory

upon which estimates of deficits are made is based primarily upon the assumption that every particle of capital now found represented in the existing plant was contributed by the stockholders. Moreover, when we come to look back over the past thirty-two years of this company's history, why should we assume that its management has been at all times beyond reproach, rather than assume that such may not have been the case? Or why should we assume that the company has at all times in the past secured from the public the highest rates to which it was entitled for the service rendered by it, rather than assume that such may not have been the case?

Our assumption of all these facts in favor of the company and against the public is absolutely necessary if we are to authorize the capitalization of deficits in such a case as this. Our refusal to make such assumption is no reflection upon the company or its past management.

It amounts in the end to our mere declaration that under no circumstances will this Commission require the people of this State to pay returns upon property the valuation of which has to be ascertained by resort to pure assumptions, or is based upon mere speculation or conjecture.

In the case of our valuation of the tangible physical property of this company, we assumed nothing. We asked to be shown, and we were shown that substantially the value claimed was there.

In the case of working capital we assumed nothing, and again asked to be shown. We were shown.

In the case of additions since September 30, 1913, to June 30, 1914, the date of the inquiry, we were again shown that such additions had actually been made.

In the case of easements we were asked to assume a value which we might well have assumed to exist, but we were given no definite proof that it did in fact exist, and therefore refused to allow any such assumed value.

In the case of the cost of organization, securing customers, etc., we demanded evidence and we have it. In this connection we were asked to assume that these expenses had been recouped

by the company from subsequent earnings. But no evidence to that effect was given, and we declined so to assume.

And now we are asked to assume that these deficits from operation existed, and that they were inevitable in the course of establishing the business as we now see it, together with all the other facts in favor of the company above referred to. On the other hand we are asked to assume that such deficits have been recouped out of subsequent earnings. As to this whole matter we feel that we have been shown nothing definite and will therefore assume nothing.

In taking this position we feel that we are fully in accord with the views of the Supreme Court of the United States as expressed in a number of cases. In the comparatively recent case of *Simpson vs. Shepard*, 230 U. S. 352, this court said:

> "The cost-of-reproduction method is of service in ascertaining the present value of the plant, when it is reasonably applied, and when the cost of reproducing the property may be ascertained with a proper degree of certainty. But it does not justify the acceptance of results which depend upon mere conjecture. It is fundamental that the judicial power to declare *legitimate* action invalid upon constitutional grounds is to be exercised only in clear cases. The constitutional invalidity must be manifest, and if it rests upon disputed questions of fact, the invalidating facts must be proved. And this is true of asserted value as of other facts."

We come therefore to an ascertainment of the costs of establishing the business actually shown in this case by specific and definite evidence.

The important exhibits on this point are Mr. Anderson's exhibit No. 83, and Mr. Whittemore's exhibit No. 84, both of which are based upon the reproduction cost new theory of ascertaining going value. For the reasons above stated we are not prepared to accept the figures in these exhibits purporting to establish deficits. But they both contain certain figures which,

taken in connection with their evidence explanatory of the exhibits, would seem to furnish a safe and reasonable guide for ascertaining the cost of at least two items going to make up the cost of establishing the business as it exists today.

In Exhibit No. 83, Mr. Anderson estimates the cost of organization and development at 2½ per cent of the directly distributed costs plus his allowance for omissions and contingencies, this estimate being $261,571 in the aggregate. Mr. Whittemore, in Exhibit No. 84, estimates the cost of "organization and preliminary development" at 2½ per cent of the directly distributed costs plus construction overheads (exclusive of interest) plus supplies, his estimate amounting on this basis to $296,000.

Mr. Whittemore states in this connection that there are no basic figures which could be submitted the Commission to show exactly what these costs were or had been, but that the item was generally taken as a percentage or ratio of other items, and he had been upheld in using such percentage by commissions in a number of recent valuations of the properties of telephone companies for rate-making purposes.

It will be noted that both Mr. Anderson and Mr. Whittemore use the same percentage, 2½ per cent, for this item, but that they differ in the base to which they apply the same, Mr. Anderson excluding all construction overheads except omissions and contingencies, and Mr. Whittemore including all construction overheads except interest during construction, and also including the material and supplies carried as a part of the company's working capital. As we have already explained, the construction overheads which have been allowed by us were just as much a part of the cost of the physical property as the cost of the labor and material which entered into the same. Therefore we feel that if the 2½ per cent is to be used it should be applied to the whole cost of the physical property, including the interest during construction (which was omitted by Mr. Whittemore in this connection because included elsewhere in his exhibit) and the material and supplies embraced in the working capital.

But we are by no means satisfied that the percentage of 2½ per cent itself is correct. As stated by Mr. Whittemore, no basic figures can be cited for its support, and it is wholly a matter of engineering judgment.

Our examination of the decisions of other commissions and appraisals by engineers throughout the country discloses that the items of organization and preliminary development are usually treated in the same way as construction overheads and are seldom distinguishable therefrom. As such, they serve to swell the aggregate percentage of such construction overheads and are frequently blanketed where a general percentage of this kind is allowed. Being treated as overheads, they are also subject to depreciation where deductions are made upon this account.

In this case, owing to the fact that we have followed throughout the investigation the system of accounting prescribed for telephone companies, we have excluded the item of organization from the construction overheads and are regarding it as an intangible value. As such it is not subject to depreciation, and consequently a 2 per cent allowance by us for organization as an intangible would be equivalent to 2½ per cent allowance for it as one of the construction overheads.

Moreover we find that where this item has been considered separately by some of the other commissions than those referred to by Mr. Whittemore, the allowance has been considerably lower than 2½ per cent, as note the allowance of 1.5 per cent in the Michigan Railroad Appraisals of 1900-01, 1.2 per cent in the Wisconsin Railroad Appraisals of 1903, and 1 per cent in the appraisal of the Stockton Terminal and Eastern Railroad Company by the Railroad Commission of California.

Under these circumstances, and in the absence of any more exact data than we have before us upon which to predicate our conclusion, we feel that an allowance of 2 per cent on the broader basis suggested by us would be substantially correct

This basis is as follows:

Total reproduction cost new	$13,062,197
Material and supplies	152,300
Total	$13,214,497
Organization and Preliminary Development 2%	$264,290
We will call this sum	$264,000

In Exhibit No. 83, Mr. Anderson also estimates the cost of selling service at $1.50 per station in Baltimore City and $2.00 in Maryland Elsewhere, the aggregate for the State as a whole on this basis being $149,022. In making this estimate Mr. Anderson followed literally the reproduction cost theory of assuming that there was no telephone service in the State of Maryland, and that the existing plant of the company would be constructed within a period of five years. Upon this supposition Mr. Anderson assumed that the public would be clamoring for the service and that it would practically sell itself. Consequently his estimate of $1.50 and $2.00 included the cost of making records, directories, etc., and very little soliciting.

We have already expressed our views as to the weight to be given "assumptions" of this kind in a rate-making case. Counsel for the company on page 48 of their brief rather concur in our view on this subject in their remarks upon these "assumptions" of Mr. Anderson, although their entire exhibit No. 84 showing deficits of something over $1,800,000 is based upon precisely the same assumptions.

Unfortunately the evidence of the company's witnesses upon the question of the actual cost of selling service was merely incidental, no effort being made to furnish any precise data as to such cost. Nevertheless the evidence which was adduced upon this point demonstrated to our reasonable satisfaction that the actual cost of selling service in the past has not averaged throughout the State less than $5.00 per station, this cost covering all expenses of advertising, canvassing, soliciting, and the numerous other efforts which are constantly being made by the company to increase its patronage.

Mr. Whittemore's Exhibit No. 84 showed that there were 88,191 stations in service in the State of Maryland on June 30, 1914. Upon this basis we find that the actual cost to the company of selling service in the past has been approximately $441,000.

Adding to this sum the $264,000 found by us to have been the cost of organization and preliminary development, we find we have a total of $705,000 as the value of the intangible or non-physical property of the respondent company.

But we are not to be understood as approving in advance this method of computing going values in any and all cases which may hereafter come before us. Each case must be decided in the light of its own facts and circumstances. In this case we are satisfied that the property of the respondent company has a substantial value as a going concern, and that it would be unjust to disallow such value upon any mere technical failure of proof which in the nature of the case is not, and could not be forthcoming. We have therefore attempted to find a method for computing from known data the cost of two items of actual expense found in such going value. But even these figures could not properly be said to be scientifically accurate or definite. They are in part, at least, offset by other considerations. On the whole we regard them as fairly indicative of the added value to be given the property because of the fact it is a going concern. Our conclusion is that such allowance is on the whole reasonable and fair both to the company and the public and is to be taken as embracing not only literally the cost of organization and securing customers, but as well, all the company's other non-physical or intangible values of every kind.

We are not so much impressed by the contention of counsel for the respondent that in determining such intangible values we should be governed in any degree by the percentages adopted or conclusions reached by courts and other commissions in valuing the property of other somewhat similar companies. Our attention has been called in this connection to the fact that the Supreme Court of Oklahoma in the case of

the *Pioneer Telephone and Telegraph Company vs. Westernhaver*, 118 Pac. 354, approved an allowance of 20 per cent of reproduction cost as "going concern value," and that the Supreme Court of New Jersey affirmed an order of the Public Utilities Commission of New Jersey allowing 30 per cent of structural cost as going value (the 30 per cent in this case being conceded by the parties as fair).

On the other hand our attention has been called to the fact that the Supreme Court of the United States in the *Des Moines Gas Company Case*, decided June 14, 1915, held that in the matter of going value each case must be controlled by its own circumstances, and refused to disturb an order of the Master declining to allow a claim of $300,000 for going value. The Supreme Court held in this case that inasmuch as the Master had taken into consideration the time and money expended in promoting and organizing the company, interesting capital therein, and generally superintending the entire enterprise, during the construction of the plant, along with other construction overheads aggregating 15 per cent of reproduction cost in all, "it can not be said that the element of going value has not been given the consideration it deserves."

The addition of the above sum for intangibles will be seen to bring the total value of the depreciated property up to $11,154,758.

It will be noted that up to the stage of adding the intangibles we have separated the property between Baltimore City and Maryland Elsewhere as well as giving the aggregate value for the entire State. In view of the conclusions which we hereinafter reach we do not feel it necessary at this time to make any apportionment of the intangible values above referred to. Such apportionment can better be made when and if it should hereafter become necessary.

We have noted that the Supreme Court in the case of *Smyth vs. Ames, Supra*, stated that in order to ascertain the fair value of the property being used by a public utility for the convenience of the public, the amount and market value of its bonds and stocks should be considered and given such weight as might be just and right in each case.

The Chesapeake and Potomac Telephone Company of Baltimore City has at the present time, and has had from its inception, a stock issue of but $10,000. As we have hereinbefore explained in discussing the question of Promoters' Remuneration and Cost of Money, it has been financed entirely by the American Telephone and Telegraph Company or other companies in the Bell System. When it required money for its corporate purposes it got such money from the parent company or one of these associates and gave its notes therefor, said notes bearing interest at 6 per cent. Consequently such notes take the place of the stocks and bonds ordinarily issued by a corporation for the purpose of securing capital.

On June 30, 1914, the date of our inquiry, the aggregate amount of these notes outstanding was $9,750,000.

We have already referred to the fact that objection is frequently made to any consideration being given the capitalization of a public service corporation, for the reason either that said capitalization may be largely or in part fictitious, or that inasmuch as the market value of outstanding stocks and bonds would be affected by any changes made by the state in such corporation's schedules of rates for service, it would be illogical and but working a circle to gauge the fair value of the property for rate-making upon the basis of such market value of the company's stocks and bonds.

However fair such criticism might be in the case of some public service corporations where there was reason to suspect over-capitalization, they could hardly apply to a case such as this, where all the evidence shows clearly that the $10,000 of

stock was paid for at par, and the $9,750,000 of notes were issued for $9,750,000 in cash, all of which went directly into building up the property.

We are therefore inclined to give considerable weight to the company's capitalization, which, in view of the fact that the notes take the place of stocks or bonds, we can regard as $9,760,000.

We have seen that the depreciated reproduction cost value of the property as of June 30, 1914, was $10,449,758. exclusive of intangibles. This sum is subject to a deduction of $100,000 on account of an item for paving included therein, as hereinbefore stated, thus reducing it to $10,349,758.

We find that the book values of the property, exclusive of intangibles, on June 30, 1914, were $12,072,036, this sum being subject to a deduction of $1,367,700 found in the depreciation reserves on that date, thus leaving the book values of the property not contributed by the public $10,704,336. Thus we have the following interesting comparisons:

Depreciated Value	$10,349,758
Book Values	10,704,336
Capitalization	9,760,000

And knowing as we do that the stockholders of this company have frequently foregone dividends in the past in order that earnings might be invested in additions to plant, it is easy to see how strongly the company's capitalization corroborates the figures which we found to represent the reproduction-cost-new-less-depreciation value as the result of our minute and most careful appraisal of the property upon that basis.

Earning Value of Property.

Consideration of the earning value of the property of a public service corporation has also been objected to on the ground that earning value depends upon rates, and if we are to make rates depend upon earning value, we could never reduce such rates.

In our discussion of the general principles of rate-making contained in an earlier portion of this opinion, we stated that the earning capacity of property under existing rates can very properly be considered in a rate-making case without being subject to this objection, provided we do what the Supreme Court of the United States has said we should do, that is, *consider* such earning value, and refrain from doing what that Court has said we shall not do, that is, give it *exclusive* or *undue* weight in reaching our final conclusion as to fair value.

Unquestionably if the property of a public utility has a considerable earning capacity under existing rates it is of more value to its owners than if it has a very small or no earning capacity whatever under those rates.

To just what extent such earning capacity may be dependent upon causes which would entitle the stockholders to have it considered in their favor in a rate-making case, is a question requiring the exercise of sound and discriminating judgment and discretion upon the part of the regulatory body. Such earning capacity may be entirely or largely attributable to the fact that the company enjoys an absolute monopoly. It may be attributable to advantages of location, or a small earning capacity attributable to disadvantages of location, as the case may be. Or it may be attributable to excellent business management, or to the fact that the business has been well organized and thoroughly established. If upon a thorough investigation it is found to be attributable to certain of the above causes, a commission might well determine in the exercise of its sound judgment and discretion, based upon a sense of fairness both to the stockholder and the public, that the former should get the benefit of the same in the valuation of the property. If to certain other of such causes, such for instance as the advantage of location, it would seem equitable that it be shared between the stockholders and the public. If to certain others, it would seem equitable that the stockholders should not profit by the same, but the public should have the benefit thereof. Such considerations cannot be weighed in a balance, or made a matter of fixed formulas.

They are essentially matters for the exercise of judgment and a sense of equity.

On the other hand, such earning capacity may be found, from either intrinsic or extrinsic evidence, to be attributable solely to excessive rates. In such a case it goes without saying that it should not be capitalized against the public.

But it is just as great a mistake to say that large earning capacity must of necessity be the result of excessive rates, as it is to say that small earning capacity is necessarily the result of insufficient or unjustly low rates.

In the particular case before us it happens that it is not necessary to go into any of the above questions, since the earning capacity of this company is such as to throw very little light upon the question of the fair value of its property.

We have seen that the value placed by us upon the property in its entirety after the addition of intangibles was $11,154,758 as of June 30, 1914. Deducting from this the $100,000 paving item, and adding $500,000 for working capital, we find we have a figure of $11,554,758 as the basis for calculating the actual rate of return under the existing rates. The company's book values happen to be reasonably close to this figure, $12,072,036, and the books show net operating revenues of $673,240 for the year ending June 30, 1914, this being at the rate of 5.83 per cent of the average book values of $11,550,404 for the year ending on that date.

As a general proposition we should say that a property which under good management and existing rates prescribed by the company of its own accord and as a matter of business policy, is not able to earn more than the legal rate of interest upon the fair value of its property, has no earning capacity which should be regarded as enhancing the value of such property for rate-making purposes.

Nevertheless we do find in these figures as to earnings at least a measure of corroboration of the conclusions we have heretofore reached as to the present value of the company's property, since the net operating revenues for the year 1914,

when capitalized at 6 per cent would indicate a property value of $11,220,664 as against the value of $11,554,758 which we have so far found.

Fair Value.

We have so fully discussed in preceding portions of this opinion the principles which should properly underlie the determination of the fair value of the property of a public utility for rate-making purposes, that we can properly at this time rest content by merely stating our conclusions in terms of dollars.

Step by step we have built up a present estimated value of $11,554,758 for this property as of June 30, 1914, made up as follows:

Directly Distributed Costs	$10,115,197
Rights of Way	347,659
	10,462,856
Construction Overheads	1,849,263
	12,312,119
Additions, Sept. 30, 1913, to June 30, 1914	750,078
Total cost new	13,062,197
Less Depreciation at 20%	2,612,439
Depreciated Value	10,449,758
Intangible Values	705,000
	11,154,758
Less over-allowance for paving	100,000
	11,054,758
Allowance for Working Capital	500,000
Present Estimated Value	11,554,758

It remains now to determine the *fair value* of this property for rate-making purposes.

So far in this opinion we have said little on the subject of original cost. The company's counsel and witnesses confessed their inability to determine from the books of the company the actual original cost of the property in service June 30, 1914.

The Commission's engineers and accountants made an effort covering several months to ascertain such actual original cost, and submitted a report and exhibit purporting to show the same at a much lower figure than that last above named. That evidence, however, was based upon so many assumptions of various kinds that the Commission has determined that it is not entitled to any weight in this inquiry.

It thereupon became necessary under the instructions given the appraisers, to estimate such original cost from the best data resonably obtainable.

We have seen that the estimates of the company as to the value of its real estate were based largely upon its actual original cost as shown by the books, although in these estimates some concessions were made to the theory of reproduction cost, thus reducing the final figure.

In the case of equipment, exchange lines and toll lines, the estimates of the Commission's engineers were based literally upon the theory of reproduction cost. Those of the company, however were based upon data as to actual costs of construction in the past, the theory being that what property had cost in the past was the best evidence, with certain modifications because of increased costs of labor and material in later years, as to what it would cost to reproduce the same at the present time. In the end we feel that the figure finally agreed upon as to the above items and approved by this Commission can fairly be said to represent the original cost of these portions of the company's property.

The figures as to rights of way were estimates based almost entirely upon actual cost data, as were those for construction overheads.

The figures for additions to plant between September 30, 1913 and June 30, 1914 were taken directly from the books of the company and represented actual original cost as well as the estimated cost of reproduction.

Our estimates of the cost of organization and preliminary development, selling service, etc. as has been seen, were based entirely upon estimates of their actual cost in the past.

The deduction of $100,000 from the item for paving was a concession to the original cost idea and a clear departure from the reproduction cost theory.

Our allowance of $500,000 for working capital was based upon the working capital actually required and in use by the company at the date of the inquiry, and in that sense can properly be said to partake of the idea of original cost.

It will thus be seen that while our final figure of $11,554,758 was ostensibly the outcome of an effort to value the property upon the basis of reproduction cost, it in reality becomes in the end fairly representative of its estimated original cost as well.

We have seen that if the earnings for the year ending June 30, 1914, were capitalized at 6 per cent, they would indicate an earning capacity of $11,220,664.

Tabulated, these figures stand as follows:

Original Cost	$11,554,758
Reproduction Cost	11,554,758
Book Value	12,072,036
Earning Capacity	11,220,664
Capitalization	9,760,000

In view of the approximate unanimity of results reached by each of these five methods of ascertaining value, it would seem clear that the fair value of the respondent company's property in this State is in or about $11,500,000, and inasmuch as this figure so closely approximates the depreciated original and reproduction cost values of the company's property as of June 30, 1914, we have accepted such value of $11,554,758 as the fair value of the property on that date for rate-making purposes.

FAIR RETURN.

This Commission's order of December 1, 1913, provided in effect that this investigation should be undertaken for the purpose of ascertaining whether the rates of the respondent company then in force provided a fair, just and reasonable return for the service rendered by said respondent in this State, and that if the Commission should determine that said rates provided more than fair, just and reasonable return, the Commission proceed to establish fair, just and reasonable rates to be charged in future.

At the hearings held during the course of this investigation no contention was made by the representatives of the company that its existing charges for service were too low; nor way any contention made by the representatives of the people that any particular rate now charged by the company was too high, although counsel for the Protective Telephone Association contended throughout that the rates in Baltimore City as a class were excessive and unreasonable.

Despite this latter contention, it seemed to be conceded that the proper course would be for this Commission to determine first the fair value of the company's property throughout the entire State and the rate of return actually received by the company thereon under its existing schedules of rates, and then, at a subsequent stage of the investigation, take up all questions relating to the fairness, justice and reasonableness of such schedules as to individuals or localities in the light of the facts thus established.

Incidentally it seemed to be conceded that while the Commission should not pass upon the question of the fairness of any particular rate charged in the existing schedules of the company, it should nevertheless give expression to its views as to the maximum amount and rate of return which the respondent company might hereafter be permitted to earn upon its property in this State.

Our valuation of the company's property has now been completed, and we have found that the fair value of such property on June 30, 1914 was $11,554,758.

The books of the company show that its net operating revenues for the year ending on that date were $673,240. This was 5.82 per cent of the fair value of the company's property on June 30, 1914.

The books also show that for some years past the company's net additions to plant investment have aggregated between nine hundred thousand and one million dollars annually, thus indicating an average plant investment of approximately $11,100,000 during the year ending on such date. Hence the actual net operating income upon the average investment during that year was approximately 6 per cent.

An examination of the books of the company shows that the net operating revenues for the years ending December 31, 1907 to December 31, 1914 were obtained after deducting appropriations to the depreciation reserves bearing the ratios to average plant investment and resulting in the accumulations of such reserves set forth in the following table:

Year	Percent of Appropriation	Amount of Reserve	Percent of Plant
1907		85,000	1.27
1908	2.44	82,700	1.08
1909	4.09	9,800	.13
1910	6.78	392,600	4.74
1911	6.34	714,400	7.92
1912	6.42	1,046,500	9.88
1913	6.28	1,242,100	10.76
1914	6.25	1,488,700	11.94

Such appropriations have resulted in setting up such reserve at a much more rapid rate, especially since 1910, than they would ordinarily be set up. In view, however, of the testimony of the company's witnesses as to the necessity from an operating standpoint of setting them up at the rate of approximately 6.25 per cent of plant investment, the Commission approves the continuance of such course until the same reach the mark we have set of approximately 20 per cent of the value of the plant investment as it may appear when that point is reached. By that time the accountants of

the company and the Commission will have been able to determine the rate of annual appropriation necessary to keep such reserves at that point.

In view of this showing we see no good reason why we should not now say that the earnings of the respondent company under its existing schedules of rates, taken as a whole, are not excessive, and that a general reduction of said rates, if we are to consider the State as a whole, would therefore not be reasonable.

It was contended, however, by counsel for the Protective Telephone Association that for the purpose of establishing charges for telephone service, the State should not be considered as a whole, but that rates for Baltimore City should be established upon the basis of the fair value of the property owned by the company in Baltimore City and the earnings of the company upon that property, it being alleged that the earnings upon the property in Baltimore City were proportionately much greater than those upon the company's property in the remainder of the State. It was also alleged in a most general way that certain specific charges in the company's existing schedules were unjust and discriminatory, and the Commission has in its files a number of individual complaints to this effect.

We trust that as a result of our findings as to the fair value of the company's property in this State and the ratio which the returns under the existing schedules bear thereto, it may be possible to adjust all such differences without further formal proceedings, but if this be found not to be possible, the Commission will in the very near future take up all such questions and determine the same.

For even though the earnings of the company under the existing rates, taken as a whole, may not be excessive, nevertheless the Commission has ample power under the Public Service Commission Law to correct any of such rates which

may subject any particular person or locality to any unfair prejudice or disadvantage.

Although we have determined that the earnings of the respondent company under its existing schedules, as a whole, are not excessive at the present time, speaking as of June 30, 1914, it would seem desirable for us to express our views as to the maximum returns which it should be permitted to earn in this State under more favorable circumstances, in order that both the company and the public may know what they may have to expect in the future.

Our quotations from the opinion of Mr. Justice Harlan in the case of *Smyth vs. Ames, supra*, are sufficient authority for the general proposition that the stockholders of a public utility are not entitled as a matter of right, and regardless of all other circumstances and conditions to any fixed or specific rate of return upon their investment in the public service, but that having elected to serve the public, the utility must render such service at reasonable rates, even though in so doing the stockholders may be deprived of any dividends whatever upon their holdings in the capital stock of the utility, the Court holding that such a condition would be a misfortune for the stockholders, but one which the Constitution does not require to be remedied by imposing unjust burdens upon the public.

This, however, is but one side of what is in fact a triangular problem.

Another side of the problem is that the State cannot lawfully require a public utility, when charging only such rates for service as are just to the public, to submit to such further reduction of rates as will prevent it from keeping its property in proper repair, and from earning any dividends whatever for stockholders; and that consequently rates for service established by the states must be such as are just both to the utility and the public under the circumstances of each particular case.

The third side of the problem relates to the broad question of public policy involved in the making of rates. By vir-

tue of the fact that this company has a practical monopoly of the telephone service in this state, and the general public is wholly dependent upon it for such service, such general public is directly interested in the ability of such company at all times to render adequate service, and secure funds with which to make such improvements and extensions to its service as public convenience and necessity may require.

In determining the maximum rate of return which a public service corporation, or individual engaged in a public service should be permitted to earn upon its or his investment, there are many things to be considered.

In the first place due consideration should be given the legal rate of interest in the State in which such service is rendered, as well as the current market rates for money, and the customary rates obtainable on investments in similar business enterprises. On the one hand it would not be reasonable or fair to require a person whose money was invested in the stock of a public service corporation to take a lower rate of return than he could obtain upon the some in other ordinary lines of investment. And on the other hand it would not be wise for the state to place such a limitation upon investments in property used in the public service for the reason that if it did so, no one would invest in such enterprises and the public would be deprived of the benefits thereof.

For much the same reasons the character of the business conducted by the utility should be considered, more particularly with regard to the question of the risks involved therein. For no sensible man will invest his money in a hazardous enterprise unless assured of some extra compensation in consideration of the chance he takes in so doing. This hazard varies greatly with the different kinds of enterprises. And it exists to a peculiar degree in the case of a telephone company. All of us have been familiar with the many radical changes which have been made in telephone service in recent years. We began with the old magneto instruments screwed to the wall and served through a grounded circuit. We now have the common battery office, the desk set and the metallic circuit.

We began with poles on all the city streets. We now have the conduits. Only a few months ago we were amazed to find that we could talk from Baltimore to San Francisco over wires. A few weeks later we found that we could talk from San Francisco to Honolulu without wires. At present hundreds of thousands of dollars are invested by telephone companies all over the country in the latest type of switchboards. In a few more months we may see the automatic switchboard which will replace them all. All these things mean risk, hazard. Some of them may mean tremendous losses in capital investment. Others may mean simply deferred dividends. But they are all to be considered in determining the fair rate of return to which the person who has his money invested in the stock of a telephone company is justly entitled.

And finally, the general effect of the rate of return upon the public at large must be considered. It may indeed well be that a rate of return limited to, we will say, six per cent upon the investment would not result in a confiscation of the property of the utility, but if the result of confining earnings to such rate would be to discourage enterprise on the part of the owners, or to make it impossible for them to go out into the market and secure funds with which to make necessary improvements and extensions, the general public would be the first to suffer by the fixing of six per cent as the maximum return to which such owners were entitled upon their investment.

As was so well said by former Chairman Laird of this Commission in the opinion filed in the *Gas Company case* hereinbefore referred to, "It is enough to say that a rate that barely escapes the level of confiscation will, in a short time, produce a condition of squalor, and squalor spells inefficiency."

All these problems were duly considered by this Commission in its opinion filed December 30, 1911, in a case in which the rates now charged by this company were under consideration. In that case Chairman Ambler said:

"Considering the nature of the business and the risks to which it is subject, and guided in a measure by the conclusions of the Railroad Commissioners of Wisconsin and the Public Service Commission for the First District of New York on the same or similar question, we are of opinion that eight per cent is a fair and reasonable return on an investment in telephone property."

For the reasons above stated, this Commission still feels that a maximum permissible return of 8 per cent in the case of this company would be fair and reasonable.

But by this conclusion we are not to be taken as determining that the respondent company is to be permitted to raise its existing rates to the point at which they will yield an 8 per cent return upon its investment. We simply determine that so long as the company's earnings under its published schedules, taken as a whole, do not yield a return upon the fair value of its entire property in this State in excess of eight per cent, said schedules as a whole will not be reduced. As hereinbefore stated, under the Public Service Commission Law of this State by which our powers are governed, we must reserve, and could not surrender if we would, the power at any time to reduce any specific charges for service which subject any particular person or locality to any unfair prejudice or disadvantage, or which are in any other respect unfair, unreasonable or discriminatory.

OFFICE OF THE PUBLIC SERVICE COMMISSION
STATE OF MARYLAND } ss:

I have compared the preceding copy with the original OPINION IN THE MATTER OF THE CHESAPEAKE AND POTOMAC TELEPHONE COMPANY OF BALTIMORE CITY—INVESTIGATION OF THE RATES AND CHARGES, PROPERTY AND AFFAIRS (Case No. 690) *on file in this office and do HEREBY CERTIFY the same to be a correct transcript therefrom and of the whole thereof.*

WITNESS, my hand and the Seal of Office of the Public Service Commission, at the City of Baltimore, this . . . . . *day of* . . . . . *one thousand nine hundred and* . . . . . .

. . . . . .

Secretary.

PUBLIC SERVICE COMMISSION

OF MARYLAND

OPINION

In the Matter of The Application of THE CHESAPEAKE AND POTOMAC TELEPHONE COMPANY OF BALTIMORE CITY for Permission and Authority to File and Publish a Schedule of Rates to be Effective Upon the Return of the Petitioner's Telephone System to It by the United States Government.	Before the Public Service Commission of Maryland Case No. 1709

Appearances:

JOSEPH S. GOLDSMITH, Esq., Assistant General Counsel;

OGLE MARBURY and H. FINDLAY FRENCH, Esqrs., of counsel for the Protective Telephone Association of Baltimore City;

OSBORNE I. YELLOTT, Esq., of counsel for the Baltimore Chamber of Commerce;

LINWOOD L. CLARK, Esq., representing the Annex League of Baltimore City;

AMOS W. W. WOODCOCK, representing the Business Men's Association of Salisbury, and the Mayor and City Council of Ocean City, Pocomoke and Salisbury;

JOHN S. NEWMAN, Esq., representing the Frederick City Board of Trade;

A. D. WILLARD, Esq., representing the County Commissioners of Frederick County;

VINCENT SEBOLD, Esq., representing the Corporation of Emmitsburg and the northern end of Frederick County;

A. R. HAGNER, Esq., representing the Mayor and City Council of Hagerstown;

LEON R. YOURTEE, Esq., representing the telephone subscribers at Keedysville and Sharpsburg, and the Washington County Agricultural Association;

HARRY R. BRINDLE, Esq., representing the County Commissioners of Washington County;

T. HUGHLETT HENRY, Esq., representing the Mayor and City Council of Easton;

W. L. SEABROOK, Esq., representing the County Commissioners of Carroll County;

CHARLES O. CLEMSON, Esq., representing telephone subscribers in Westminster;

L. B. HAFER, Esq., representing Taneytown;

WILLIAM C. WALSH, Esq., representing the Mayor and City Council of Cumberland;

CHARLES H. MCNABB, Esq., Messrs. D. G. HARRY, A. W. HEAPS and HENRY WHITEFORD, representing the northern end of Harford County and the subscribers of Cardiff Exchange;

W. BEATTY HARLAN, Esq., and Mr. JOHN WEBSTER, representing the Churchville Exchange;

C. E. BRYAN, Esq., representing the State Agricultural Society;

FRANK BOMBERGER, Esq., representing The Maryland State Grange;

A. L. HARRIS, Esq., representing the Kent County Grange;

MRS. A. L. HARRIS, representing Pomona Grange of Kent County;

MR. L. STERN, representing the Phone Subscribers' Association;

MESSRS. DE COURCY W. THOM, W. H. BAHLER and OSCAR T. TAYLOR, representing the City-wide Congress of Baltimore City;

C. [redacted]ARTE, SAMUEL K. DENNIS and CHARLES H. CARTER, Esqrs., representing The Chesapeake and Potomac Telephone Company of Baltimore City.

By the Commission. Filed August 18th, 1920.

I

HISTORY OF THE CASE

(a) *Previous Proceedings*

This case requires only that the Commission determine the reasonableness of the rates and charges contained in a schedule filed with the Commission by The Chesapeake and Potomac Telephone Company of Baltimore City, but since the valuation of the property for rate-making purposes as found herein adopts and grows from the estimated fair value as determined in a previous case, it is necessary to refer to matters anterior to the present application in order to make clear the findings in this proceeding.

The Chesapeake and Potomac Telephone Company of Baltimore City hereinafter called the Company, was one of the first public utility corporations to invoke the jurisdiction of the Commission, and on August 18th, 1910, soon after the creation and organization of the Commission, it filed tables of proposed

telephone rates for Baltimore City. The Engineering and Accounting bureaus of the Commission secured much data, and later Mr. Dugald C. Jackson, of Boston, a prominent consulting engineer, thoroughly familiar with and experienced in the valuation of telephone property, was employed to study and make report to the Commission on the matters presented by the petition of the Company. The findings of the Commission are contained in its opinion dated December 31st, 1911, written by the Hon. James M. Ambler, then our Chairman, but now a member of the Supreme Bench of Baltimore City. In Case No. 38, the Company's book value of investment in Baltimore City was found to be $5,667,642.10 and the value of the property in use in Baltimore City $5,665,729.74, both totals as of September 30th, 1910. The order in Case No. 38 was passed on January 2nd, 1912, and approved and authorized most of the rates in the schedule presented by the Company, but subsequent orders postponed the dates at which certain specific rates became effective.

Soon after the determination of Case No. 38, there was formed an organization known as the Protective Telephone Association of Baltimore City, with a large membership, composed of patrons of the Company, and this body took steps to have presented to the Commission a petition of the grievances of telephone subscribers in Baltimore City. Through Ogle Marbury, Esq., and H. Findlay French, Esq., who were the first, and are still, the counsel of the Association, application was made to the Commission on January 6th, 1913, to have the Assistant General Counsel designated as People's Counsel pursuant to the provisions of Ch. 563 of the Acts of 1912, in order that he might assist the Counsel of the Association in the prosecution of a proceeding to have the Baltimore City rates of the Company reviewed and a valuation for rate-making purposes determined. The Association's petition attacking the findings and order in Case No. 38 was presented on March 31st, 1913, and The Chesapeake and Potomac Telephone Company of Baltimore City, the Chesapeake and Potomac Telephone Company (N. Y.), and the American Telephone and Telegraph Company (N. Y.) were made respondents. On December 1st, 1913, the Commission ordered that an investigation be had of the property and affairs of the respondent companies and the Assistant General Counsel was directed to plan and conduct the inquiry. A new case (No. 690) was docketed and therein were filed, as parts thereof, the preliminary report which had been made to the Commission by the Assistant General Counsel on October 20th, 1913, the petition of the Association, the answers of the respondents and other papers and documents relating to the matters proposed to be investigated. Osborne I. Yellott, Esq., had, in the meantime, been appointed Assistant General Counsel, and the inquiry was planned and executed under the guidance of this most competent, industrious and efficient expert in the domain of public utility regulation. The investigation of the Company's property, business, books and affairs was systematic, thorough and exhaustive. Mr. Yellott had the assistance of Messrs. Marbury and French, who made a deep study of the problems presented, and of the Commission's engineers and auditors, and also of the services of the best telephone engineering and accountancy experts that could be procured. The work in this case is epochal in the development of utility regulation by State Commissions and is universally conceded to be a monumental undertaking, masterfully executed according to the most modern

and approved methods of engineering and accounting rules for the determination of rate-making values. The findings of the Commission are set out in an opinion written by Chairman Albert G. Towers, dated March 8th, 1916, constituting a leading case frequently cited in other jurisdictions by courts and commissions.

In Case 690, our predecessors on the Commission found:

(1) That the fair value for rate-making purposes of the property of The Chesapeake and Potomac Telephone Company of Baltimore City in this State was $11,554,758, as of June 30th, 1914.

(2) That the net income from the operations for distribution, during the year ended June 30th, 1914, was $673,240, the same being at the rate of 5.82% upon the investment aforesaid.

(3) That the maximum return which the respondent company should be permitted to earn upon its property used in the public service in this State is 8%.

(4) That the earnings of the said company under its existing schedules of rates, taken as a whole, are not excessive, and a general reduction of said rates would therefore not be reasonable.

(b). *How Present Case Arises*

The Congress of the United States by a Joint Resolution approved July 6th, 1918, authorized the President of the United States to take possession and control of the telegraph and telephone systems in the United States and to operate the same for the period of the war. By Proclamation dated July 22nd, 1918, the President of the United States assumed possession and control of the telephone and telegraph properties and directed that supervision, control and operation of the systems be exercised by the Postmaster-General of the United States. During the period of operation of the telephone properties by the United States Government, which began on August 1st, 1918, the Postmaster-General, acting under and by virtue of the authority conferred upon him by the Presidential Proclamation, issued orders providing for certain increased rates and charges for telephone service, which new schedules and altered plan of charge for services became effective so far as toll rates were concerned on January 21st, 1919, and operative in respect to exchange rates on May 1st, 1919.

The Commissions of certain states tested before the courts the right of the Postmaster-General under the Joint Resolution of Congress and Presidential Proclamation to fix rates for intrastate service, but the Supreme Court of the United States held that such power was included within the terms of the Joint Resolution, and that the Joint Resolution was valid under the Constitution as an exercise of the War Power. (Dakota Central Telephone Co. vs. State of South Dakota 250 U. S., 163.)

Subsequent legislation by Congress approved by the President on July 11th, 1919, provided for the return of the telephone systems to the owning corporations, the return to private ownership to be effective on the 31st day of July, 1919, but it was further provided that the toll and exchange rates established or approved by the Postmaster-General should continue in force for a period

not to exceed four months from the date when the Act by its terms was to take effect (July 31st, 1919). During the four months' period, which would expire on December 1st, 1919, the Postmaster-General's rates were subject to modification by the Commission, but on December 1st, 1919, the rates established under Federal control would expire by limitation and the rates in force and effect at the time when possession was taken by the Postmaster-General would revive, and having been established in a controverted case (No. 690) would remain operative until modified or changed by the Commission. The Chesapeake and Potomac Telephone Company of Baltimore City filed its petition with the Commission on July 31st, 1919, praying that it be permitted to file new tariffs and schedules; that, pending action on its petition it be allowed to charge and collect the rates made effective by order of the Postmaster-General; and that it be permitted to establish other and different rates sufficient to produce an adequate return upon the property of the Company used and useful in the public service. With this petition were filed the annual balance sheets of the Company, tabulations of revenues and expenses, the rates made effective by the Postmaster-General and estimated revenues and expenses under these rates.

The Commission therefore docketed the present case (No. 1709), and by order dated September 8th, 1919, set the hearing for October 5th, 1919, and further assigned the Assistant General Counsel, Joseph S. Goldsmith, Esq., to represent and assist the public and the patrons of the Company in the presentation of this case and the prosecution of their cause. Notice of the pendency of the Company's petition was given to the Commissioners of each of the twenty-three counties and to the municipal authorities of the incorporated cities and towns in the State, and to afford those interested an opportunity to prepare their protests a further postponement until November 18th, 1919, was ordered. Numerous protests against the granting of any increase in rates were filed by individuals, firms, corporations, improvement organizations, granges, boards of trade, towns, villages, cities and counties. The Protective Telephone Association of Baltimore City which had been active in the interests of its members in the previous cases before the Commission, through Messrs. Marbury and French, as Counsel, intervened in the proceedings and requested that the Commission require the Company in presenting its figures so to set up and present its data as would show as clearly as could be reasonably done the capital investments of the Company on June 30th, 1914, and the subsequent additions thereto, separated as between Baltimore City and Maryland elsewhere, and the tables of receipts and expenses segregated in like manner. The Baltimore Chamber of Commerce, moved by a commendable civic spirit, employed Osborne I. Yellott, Esq., to represent the telephone subscribers.

Therefore, Mr. Yellott made a request as had Messrs. Marbury and French that the statements of the Company be so framed as to show the capital and the operating costs of Baltimore City separated from the figures for the rest of the State. An order was accordingly entered on November 20th, 1918, requiring the Company to tabulate its data in order to separate the figures relating to Baltimore City from Maryland elsewhere. The case was postponed until these statements could be prepared by the Company, presented to and analyzed by

the Counsel for the protestants, but in the meantime (order dated November 28th, 1919) the rates established under Federal control were continued in force until the determination of the case. The hearings were begun January 5th, 1920, and the Company presented certain data. At the request of Counsel, a postponement was had to permit the statements to be examined and studied. In the meantime, the illness and subsequent deaths of our late Chairman, the Honorable John Milton Reifsnider, and of the Commission's Chief Engineer, Mr. Charles G. Edwards, occasioned postponements and the hearings were not resumed until June 14th, 1920.

II

EXAMINATION AND INVESTIGATION

(a) *Company's Case for Increased Rates*

The Company, through Mr. H. C. Gretz, its chief accountant, first offered sixteen exhibits which with supplements brought the date of Case No. 690 (June 30th, 1914) up to December 31st, 1919. The first eight exhibits show the additions to the book value of fixed capital as well as the increase in plant units; Nos. 9 and 10 are comparative statements of material costs since 1914; No. 11 contains employee and wage statistics, and labor turnover figures; No. 12 starts with the valuation fixed by the Commission in Case 690 and with the addition shown in detail on Nos. 1 to 8 brings the previous valuation up to December 31st, 1919; No. 13 details the deductions in estimated fair value as shown by No. 12; No. 14 gives the accumulations in fixed capital reserve; No. 15 is a comparative statement of actual return from operations, June 30th, 1914, to December 31st, 1919; No. 16 is a statement of revenues and expenses under the existing rates and present prices for labor and materials.

The above-mentioned financial and accounting exhibits are from the books of the Company kept in accordance with the Classification of Accounts prescribed by this Commission, which has adopted the system made applicable to interstate accounts by the Federal Commission. After the exhibits had been introduced and explained, Mr. Gretz was cross-examined concerning the data, its preparation and the accounts from which taken, by the Assistant General Counsel and the attorneys for the protestants. A recess of several weeks was then taken, in order that the exhibits might be analyzed and studied.

The following additional statements were prepared by the Company at the request of the Assistant General Counsel, and when the hearing of the case was resumed were made a part of the record: No. 17 showing the rate of return under the present and proposed rates; No. 18, revenues and expenses by months from June 1st, 1915, to April 30th, 1920; No. 19, sample of estimate, completion report and ledger sheet indicating method followed by the Company in accounting for additions to and retirements from fixed capital; No. 20, statement showing by projects, additions to and retirements from fixed capital during the five-year period, June 30th, 1914, to June 30th, 1919.

(b) Assistant General Counsel's Exhibits

After examining the statements presented by the Company, the Assistant General Counsel prepared and filed the following exhibits: A. G. C. No.1, showing the average monthly percentage of revenue and expenses for the years 1915 to 1918, inclusive; No. 2, indicating the monthly increase in the number of telephone stations; No. 3, the annual increase in stations of the Company, operating in Maryland as compared with the increase in the entire Bell System; No. 4, the average number of stations for each year, from 1915 to 1919, inclusive; No. 5, showing the reproduction cost new of depreciable property from June 30th, 1914, to June 30th, 1919, and the per cent. of the average value set apart each year in the depreciation reserve; Nos. 6 to 12 are copies of the orders and bulletins of the Postmaster-General, the Acts of Congress, the Presidential Proclamation and Message to Congress containing the report of Federal operation; No. 13, study of the present structural value of the property as of June 30th, 1919, based on an average age determined from gross additions to property, to which was applied the depreciation tables used by Mr. Anderson, the Commission's engineering expert in the previous case (690); No. 14, the Assistant General Counsel's estimate of fair value for rate-making purposes as of June 30th, 1919.

Mr. Goldsmith also read certain relevant matter contained in the annual reports of the American Telephone and Telegraph Company, (parent Bell Company), for the years 1915 to 1919, and then filed the reports as part of the record in these proceedings.

(c) Baltimore Chamber of Commerce Exhibits

The Counsel for the Baltimore Chamber of Commerce was enabled through the assistance of the Commission to retain Mr. F. Lincoln Hutchins, as expert statistician, and under the direction of Mr. Yellott there were prepared and filed a series of charts based on the actual results of operations from 1916 to 1919, with forecasts based on the previous years.

No. 1, trend of gross revenues from 1915 to 1919 with forecasts up to 1921.

Nos. 2 to 7, inclusive, being charts of expenses and deductions from income for each month and then by 12 months' moving average.

Nos. 8 and 9, being logarithmic curves of the individual maintenance and traffic accounts from 1915 to 1919.

No. 10, expense trends based on a percentage of 1915, as well as actual sums expended from 1915 to 1919, together with forecast for 1920.

Nos. 11 to 16, inclusive, and No. 18 are graphs of revenue, expenses and fair value showing the percentage of Baltimore City and Maryland elsewhere to figures for the State as a whole.

Nos. 17 to 19, show the growth of stations by numbers and percentages for each exchange from 1910 to 1920.

During this discussion of the facts and figures in the case and his argument to the Commission, Mr. Yellott presented and explained a series of six charts that he had prepared to illustrate graphically his interpretation of the princi-

ple established by the Commission in Case 690, with respect to the deduction for accrued depreciation and the creation of a corresponding reserve from earnings.

(d) *Statements Filed by the Protective Telephone Association*

At an early stage of the case, Messrs. Marbury and French requested the Company to separate the data contained in certain of the financial and accounting exhibits. This was done by Mr. Gretz, the statements furnished to counsel. From these statements, showing the general figures for Baltimore City contrasted with the figures for the entire State, Messrs. Marbury and French made studies and graphs, which were presented and explained to the Commission in the form of exhibits as follows:

Nos. 1 to 8, the actual figures showing Baltimore City as contrasted with Maryland elsewhere.

No. 9, total average and adjusted fair value, contrasted.

No. 10, contrasted net returns.

No. 11, percentages of net returns to fair value as between Baltimore and Maryland elsewhere.

No. 12, toll service, revenues compared, Baltimore and the rest of the State.

No. 13, ratio of toll service to all revenues, Baltimore to the rest of the State.

No. 14, expenses of depreciation and amortization, Baltimore and Maryland elsewhere contrasted.

No. 15, current maintenance, Baltimore and the rest of the State compared.

No. 16, fair value comparisons, Baltimore and the rest of the State.

No. 17, net returns, first four months 1920, segregated and compared, Baltimore and Maryland elsewhere.

No. 18, per cent. of increase from proposed rates as between Baltimore and Maryland elsewhere.

The Protective Telephone Association filed three exhibits, Nos. 19, 20 and 21, showing tolls billed to subscribers in Baltimore City during 1919; comparison of Bell System telephone rates in cities of over 400,000 population with Baltimore City proposed rates; and accumulation in fixed capital reserves, separated as to Baltimore City and Maryland elsewhere, 1915 to 1919, inclusive.

(e) *Annex League Exhibits*

At the request of the Annex League, through Linwood L. Clark, Esq., its attorney, the Company produced and filed its contract with the Western Electric Company, which latter corporation manufactures the standard Bell apparatus and equipment and also acts as purchasing agent for other supplies; the license agreement between the Company and the American Telephone and Telegraph Company, which contract covers the use of instruments and the rendition of special services, and prescribes the basis of settlements for long distance messages, the Company agreeing under this contract to pay the American Telephone and Telegraph Company 4½% on gross receipts. The above constitute Exhibit No. 1.

The Counsel for the Annex League also prepared and filed the following exhibits based on data furnished by the Company: No. 2, statement showing actual long distance receipts and proportionals for the first six months of 1920, and estimated for the full year 1920, and the payments to the American Telephone and Telegraph Company under the license agreement, for the first six months of 1920, and estimate for the full year 1920; No. 3, covers correspondence taken from the files of the Company, dealing with shortage in the supply of cable; No. 4, statement of advances from Bell System corporations outstanding on December 31st, 1919; No. 5, comparison of net additions to fixed capital with increase in stations; Nos. 6 and 7, average dividend returns on owners' average equity, 1914 to 1918; No. 8, comparative statement of plant and station development; No. 9, copy of the Company's provisional estimate or budget for the year 1920.

(f) *Analysis and Discussion*

It will be seen from a reading of the above exhibits, which were explained and discussed before the Commission, that the supporting data of the Company were subjected to a critical analysis by the Counsel for the Commission and for the protestants. The additions to fixed capital as well as the past earnings and estimated future earnings were charged, the trends established, variations investigated, and explanations elicited and weighed. The Counsel had the assistance of the Chief Engineer and Auditor of the Commission as well as independent statistical expert advisers, each of whom tabulated and checked the above data.

III

FIXING OF FAIR VALUE

(a) *Property Accounts*

The book value of the total fixed capital and progress accounts as of June 30th, 1914, (Case 690), was $12,072,035, and as of December 31st, 1919, $18,523,885, a net increase of $6,451,850. The increases from year to year were charted during the hearings. These charts showed the growth to be uniform until 1917, and thereafter, allowances being made for the increased cost of labor and materials as set forth on the Company's Exhibits 9, 10 and 11, the trend continued approximately normal. The reproduction cost new as of June 30th, 1914, (Case 690), was $13,062,197, to which the records of the Company show has been added $10,028,868, for new property placed, and from which should be deducted retirements to the extent of $3,819,006. This gives a net increase in the reproduction value on the actual cost basis of $6,209,860, making the reproduction cost new value as of December 31st, 1919, $19,272,057. The difference between the net increase in book value and in the reproduction cost new increase is due to the fact that plant retirements are credited to book values at the average book cost but were valued for the purpose of bringing up to date the previous reproduction figures at the average prices used by the Commission in the previous case.

Retirements of plant and equipment were made at the values found by the Commission in Case No. 690, by applying the ratio of reproduction cost new to book values as of June 30th, 1914, and thus is accounted for the difference between the net addition in book values and the net additions to reproduction cost new. It should be noted that the reproduction cost new was not set up by the Company at the present-day high prices, but that it used, and the Commission in its calculations employed, the values as of June 30th, 1914, for the plant still in use, with additions at their actual cost.

It was suggested at the hearing that the fixed capital of the Company had increased more rapidly than the number of stations and that this indicated that there is at the present time considerable plant not producing revenue, and that the Commission might direct the Company to devote its energies to the development of its business and thus obviate the necessity for an increase in rates. It will be seen from the exhibits in the case, (Company's Exhibit No. 7), that in June, 1914, the number of stations was 89,697, and on December 31st, 1919, the number was 122,512. Taking these figures in conjunction with the cost new on June 30th, 1914, ($13,062,197), and the cost new on December 31st, 1919, ($19,272,067), we find the average investment per station on June 30th, 1914, $145.62 as compared with $157.31 on December 31st, 1919. The Commission believes that a reasonable explanation of this apparent disparity may be found in Company's Exhibits Nos. 9, 10 and 11, which show the increase in cost of material and labor. These increased costs not only apply to the new stations being installed, but also to plant which has worn out and been replaced, and from the analysis of the figures made by the Commission the increase in the investment per station does not appear to be unreasonable.

(b) *Depreciated Value*

In the previous valuation case (No. 690), the Commission was of the opinion that the property had depreciated for rate-making purposes 20% of its cost new. This conclusion was arrived at after a consideration of the actual deterioration as shown by the Company, and the estimated theoretical depreciation submitted by the Commission's Engineer and expert based on the estimated average age and plant life tables. The Commission held that the "present (June 30th, 1914) depreciated value of the Company's property upon the basis of reproduction cost new is 80% of this amount ($13,062,197) or $10,449,758."

After limiting the Company to accumulations in the depreciation reserve to a maximum average of 20% of the plant investment, the Commission held that the Company should at all times thereafter be entitled to earn upon the remaining 80%. In the present Case (No. 1709), the Assistant General Counsel using the records of the Company, estimated the average age of the property and with the use of the life tables prepared by the Commission's Engineer in Case No. 690, found the structural value of the property to be approximately 70% of its cost new. An examination of the depreciation reserves discloses, however, that no such accumulations have been made, as on December 31st, 1919, the reserve shows a balance of only 16.33%. If the Commission were to fix the rate base on the 70% structural value so determined, some consideration ought to be given to the deficit in the reserves, which could be accomplished by amortizing the deficit over a period of the future which will reduce the available net earnings.

The Counsel for the Protective Telephone Association interprets the ruling of the Commission in Case No. 690 to mean that the fair value for rate-making purposes therein found represents the Company's full investment to which should be added the investment subsequently made by the Company determined by deducting the accumulation in the depreciation reserve from its increase in plant investment.

Notwithstanding the forceful arguments advanced by the Assistant General Counsel and the Counsel for the Protective Telephone Association, we are of the opinion that the Commission in deciding Case No. 690 had in mind the bringing of the Company's financial condition to a state of health and soundness, by permitting it gradually to create a depreciation reserve not to exceed 20%. This is shown by the language used on page 54 of the opinion:

> "Meanwhile the Company will further be held entitled to set aside out of earnings from year to year a sum to be added to its present depreciation reserves until such time as said reserves amount normally to a maximum average of 20 per cent. of the plant investment."

This plan outlined by the Commission then composed of men with unusual knowledge and experience in corporate finance we are not disposed to change. We are unable to agree with the contentions so ably presented by Counsel and hold that the Commission in Case No. 690 decided that the Company was entitled to earn upon 80% of its plant investment and that a reserve might be created not to exceed 20%.

(c) Intangibles

In Case No. 690, the Commission made an allowance of $284,000 for preliminary development and organization costs and $441,000 for the cost of securing stations, the latter being at the rate of $5.00 per station. The Company has claimed additional value at the same rate for the net stations established since June 30th, 1914. The Assistant General Counsel and the Counsel for the Baltimore Chamber of Commerce have urged the Commission not to permit the further capitalization of this item.

After consideration, the Commission has decided that the additions to this item amounting to $171,560 should not be included in the calculation of fair value for rate-making purposes, but should be charged entirely to operating expense.

(d) Working Capital

The opinion in Case No. 690 fixed working capital at $500,000 and the Company now claims $1,034,205. When considered in relation to the plant investment the percentage in 1914 is 3.8% as compared with 3.86% on December 31st, 1919. The Company claims that its need of a relatively larger working capital is due to the enhanced cost of materials, and the necessity of keeping on hand larger quantities because of the difficulties in obtaining prompt deliveries.

The Commission, however, has considered that the relations between the Company and its parent and manufacturing companies should enable it to operate on a moderate working capital and that in normal times a smaller

amount than the sum claimed will suffice, and hence the Commission will allow but $750,000 as working capital in calculating the fair value for rate-making purposes, this sum being approximately one-eighth of the annual expenses.

(e) *Deductions on Account of Government War Projects.*

The war-time telephone systems constructed by the Company to equip cantonment and signal corps stations were billed to the Government. On December 31st, 1919, work of this class to the cost of $21,876 remained unbilled to and unpaid by the Government. To connect these war-project systems with the exchanges of the Company, certain trunk lines were strung, of which a few are not now used or useful in the Company's general system. The value of these excess trunk lines is $25,238, making a total deduction on account of Government war work of $47,114.

(f) *Fair Value Summary.*

The fair value for rate-making purposes (as of June 30th, 1914) as found by the Commission in Case No. 690 and the fair value (as of December 31st, 1919) are shown in the following tabulation:

	June 30, 1914.	December 31, 1919.
Total cost new	$13,062,197	$19,272,057
Less depreciation of 20%	2,612,439	3,854,411
Depreciated value	$10,449,758	$15,417,646
Intangible values	705,000	705,000
	$11,154,758	$16,122,646
Less over allowance for paving (included in reproduction value, June 30th, 1914)	100,000	100,000
	$11,054,758	$16,022,646
Allowance for working capital	500,000	750,000
	$11,554,758	$16,772,646
Deduction on account of property built to care for Government war requirements	----------	47,114
Estimated fair value as of December 31st, 1919	----------	$16,725,532

IV

INTERCORPORATE RELATIONS

(a) *American Telephone and Telegraph Company.*

During the course of the case, criticism was repeatedly directed against the Bell System. The charge was in effect that the Bell System constituted a monopoly, the interstate field being controlled by the American Telephone and

Telegraph Company and the intrastate business by the same company, operating under the form of The Chesapeake and Potomac Telephone Company of Baltimore City. It was disclosed in the present case, as well as in cases Nos. 38 and 690, that the American Telephone and Telegraph Company is the central organization of the Bell System, succeeding the American Bell, which in turn grew out of the National Bell. Originally the parent Company was a patent-controlling organization which encouraged the formation of local operating companies. The parent company received rentals and royalties from and frequently had stock holdings in the local company. The telephonic art had not developed sufficiently to permit talking between the exchanges in the different States, and when scientific discovery and inventive genius had made long-distance telephonic communication possible, the local companies were either unwilling or financially unable to build the heavy lines required. The parent company, therefore, strung the wires and supplied the specially adapted equipment. Thus came about the difference in the ownership of the long distance from the local service lines.

The weakness of the local companies in resources and service as well as the advantages of a strong central organization brought about the gradual but eventual gravitation of the control or ownership of the local companies to the parent company and there emerged the giant Bell System with the powerful American Telephone and Telegraph and its many associated companies.

It is this feature of the telephone situation in Maryland which was subjected to criticism. It cannot be denied that the parent company enjoys a monopoly of the long distance service and that the local company is without competition in the exchange message field. The parent company is engaged in interstate business and is subject to the jurisdiction of the Federal Commission. The local company is engaged solely in intrastate business and is subject to the jurisdiction of the State Commission. In the opinion of this Commission, such a plan of regulation is ideal in the case of a monopoly of this kind, and a criticism of such a form of organization becomes in effect a condemnation of regulation itself.

(b) *Contractual Relations*

Under the contract between the parent and local companies, the American Telephone and Telegraph Company supplies, keeps in order and replaces the telephone sets, title to which remains in the parent company. In addition, the American Telephone and Telegraph Company renders to the affiliated company such services as engineering and accounting advice, and engages in extensive experimental laboratory work through men famous in science and expert in invention. It is unquestionably true that technical and legal services of the highest order, which could perhaps not be obtained by the local company except at prohibitive prices, if at all, are, through this connection always available to the associated company. The outstanding objection to the arrangements whereby, in consideration of the above, the local company pays 4½% of its gross receipts is that the sum paid is made to depend upon gross revenues and is not proportionately relative to the value of the services. It may be contended that it is both customary and reasonable that the compensation to the parent company should be increased as the earnings of the local

company increase, but it is also true that in a great measure the rates which result in the revenue are determined by the operating expense, and hence the greater the operating expense the greater will be the compensation of the parent company. The 4½% payments under thepresent rates amount to 1.36% of the cost new of the property on December 31st, 1919. In several jurisdictions values have been determined for the receiver, transmitter, and induction coil comprising the telephone set, estimates made of the replacement for wear and tear, the retirement of obsolete parts and substitution of improved apparatus, and a calculation made of a fair return for this part of the consideration moving to the local from the parent company, and this test seems to justify approximately one-half of the amount paid. The other services rendered to the local company do not so easily permit of valuation. Under the agreement between the Company operating in Maryland and the parent company, the local company is able to borrow money at exceedingly favorable rates and during even the present times of shortage of money and of high interest the local company owes the parent company $14,256,563 on 6% demand notes. The financing of the proposed automatic exchange, which is to be established in Baltimore City, will be done by the parent company at 6% interest, without any discount, the local company receiving 100 cents on each dollar. The Commission has recently had to pass on matters in connection with present-day financing of projects by other utilities under its jurisdiction, and hence appreciates the worth of this feature of the intercorporate agreement. There are also other services rendered in engineering, plant, traffic, commercial, legal and accounting matters.

Although the basic patents on the telephone have expired, the parent company holds letters patent on many improvements, said to number more than two thousand, the use of which in standardized Bell apparatus furnished to the local company or in equipment that may be procured by it is open to the Maryland corporation. This contract was before the Virginia Commission in a case decided during the present year, and in the course of the investigation, one of the Commissioners went to New York and visited the laboratory of the American Telephone and Telegraph Company. The opinion states that—

> "Such an inspection demonstrates at once the value of the standardization of telephone use throughout the country." * * * "It is probable that America is further ahead of all other lands in the matter of the use and development of the telephone than in any other one particular. We feel that this is largely due to the wise policy pursued by the Bell interests in the United States. A centralized organization has furnished the apparatus and the engineering advice and in the early days furnished the finances."
>
> (Case No.855, decided July 22rd, 1920.)

The Virginia Commission did not disallow the 4½% of gross receipts as an item of expense, but withheld definite approval of the plan.

As did the Public Utilities Commission of the District of Columbia (P. U. R., 1920 D, p. 614), and the State Corporation Commission of Virginia in Case No. 885, July 23rd, 1920, we indorse the proposal made by the Indiana Commission:

> "That the entire question of the 4½% agreement be submitted to joint study by the American Telephone and Telegraph Company and the National Association of Railway and Utilities Commissioners, acting for the various Commissions of the country, in order that this important question may find uniform solution throughout the country."

Meanwhile for the purposes of this case, we will consider such payment a reasonable expenditure.

(c) *Western Electric Company Contract*

The Company was required to and did file with the Commission its agreement with the Western Electric Company. The Western Electric Company is a corporation, with its stock ownership lodged entirely in the American Telephone and Telegraph Company. It manufactures standard Bell telephone equipment and acts as purchasing agent for the local and other companies of the system. With the establishment of such an adjunct to a business, and the conduct of a separate but exclusively owned manufacturing and purchasing agency, no fault in principle can be found. So far as the Commission has been able to find, the local company secures its apparatus at less then the prices charged companies not associated with the Bell System. The advantages of buying general supplies in large quantities for all the Bell companies are apparent. We have thus far found nothing objectionable in this contract, but would recommend that this too be the subject of study by the National Association in order to determine its usefulness to the local companies and how far the 4½% gross receipts fees and the profits on purchases and supplies should be considered in rate making by the State Commissions.

V

NET EARNINGS

(a) *Past and Present*

The Company's Exhibits Nos. 15 and 15-A show the net return from operations during the past five years, which exhibits were supplemented by other data furnished at the request of counsel and filed as Company's Exhibit No. 18. From these tables the net return is shown as follows:

	Revenues	P. C. of 1915	Expenses	P. C. of 1915	Net Return from Operations
Year 1915.....	$3,623,359	100	$2,911,195	100	$712,164
Year 1916.....	4,023,499	111	3,289,434	113	734,065
Year 1917.....	4,440,734	122	3,629,467	125	811,267
Year 1918.....	4,872,531	134	3,943,854	135	928,677
Year 1919.....	5,547,796	153	4,997,461	172	550,332

Counsel for the Baltimore Chamber of Commerce submitted a series of charts showing in graphic form the trend for the full five years of the main groups of revenues and expense accounts and the resulting net returns.

From these charts it may be seen that the gross revenue of the Company has experienced an almost normal growth, if allowance be made for the rate increases introduced during the period of Federal control. Expenses maintained approximately the same trend up to and including the year 1918. During the year 1919, however, expenses increased much more rapidly than the revenues. Examinations by counsel disclosed that the abnormal increase was due mainly to the maintenance and traffic accounts which largely represent the increased costs of wages and materials.

(b) *Estimated Future Earnings*

The Company filed Gretz Exhibit No. 16, which is a statement of revenues and expenses under present conditions. This statement was based primarily on the year ending April 30th, 1920, and changes in the basic wage schedules were dated back to May 1st, 1919. With this adjustment the Company arrived at net revenues which were equated to plant and stations as of December 31st, 1919. Counsel for the Baltimore Chamber of Commerce and Mr. F. Lincoln Hutchins, the statistician, submitted estimates for the current year (1920) based on the trends as established in the charts of past revenues and expenses. The Company's witness subsequently filed a statement representing an estimate for the year 1920 for the purpose of comparison with the figures submitted by Messrs. Yellott and Hutchins. For gross revenues, the forecasts ranged from $6,160,000 to $6,501,519, and the total expenses and deductions varied from $5,298,000 to $6,028,400. After fully considering these estimates and studying the supporting data of each, the Commission feels that a fair forecast for the year 1920, allowing for changes since January 1st, 1920, in the basic wage scale, would be $6,400,000 for gross revenue and $6,000,000 for expenses and deductions, leaving a net revenue of $400,000. The Company's claim for expenses and deductions was $6,028,400, and in allowing $6,000,000, the Commission has practically accepted the Company's estimate. This is done, however, with the belief that the increases in the wage schedule that have recently been made and which are herein allowed should reduce the excessive labor turnover which the company has experienced and therefore result in increased efficiency of operation. This increased efficiency which the Commission expects should result in better service or a lowering of expenses. Inasmuch as the Commission has not made any reduction in the estimate of the Company's showing of expenses under present conditions, as it might be justified in doing in view of the expected increased efficiency, the Commission will exact of the Company the highest degree of good service and insist that any savings in operations be applied to the betterment of the service rendered to its subscribers. Under fair value, we have found the estimated fair value of property used and useful in the public service throughout the State of Maryland, as of December 31st, 1919, to be $16,725,582. For the purpose of testing the reasonableness of the present rates, and after making allowances for prospective additions, we will assume that the estimated average fair value during

the year 1920 will be $17,250,000. On this basis, the present net earnings yield 2.31%, from which it is evident that the Company's petition should receive favorable consideration.

VI

THEORIES OF RATE DETERMINATION

(a) *Local Service Costs as Bases for Rates*

The Protective Telephone Association of Baltimore City was organized in 1912, and early in the following year made its contention in behalf of the Baltimore telephone users. This Association then consisted of five hundred members, which number soon grew to nearly a thousand, and in the succeeding years its ranks have not become depleted nor have its aims varied or its efforts diminished. The career of this organization betokens an enlightened and awakened civic spirit which indicates health and vigor in our citizenship.

The arguments of Messrs. Marbury and French evoked from the Commission in Case No. 690 the announcement that it would pass such order or orders as—

> "the Commission may hereafter deem reasonably necessary to correct any of such rates which may be found upon further consideration to subject any particular person or locality to any unfair prejudice or disadvantage."

After the opinion was filed in Case No. 690, the Association filed a new petition charging that the rates produced excessive earnings and that Baltimore City was being discriminated against. Action on this petition was delayed by the investigations being made of other utilities, and when the war broke out the whole matter by common understanding was delayed until after peace had been assured. After the Federal Government had turned back the telephone property to the Company and an application had been made to keep in effect the Postmaster-General's rates, the Association intervened, alleging anew discrimination against Baltimore City. Upon the request of the Association, the Commission ordered the Company to file statements showing its capital investments and receipts and expenses separated as between Baltimore City and Maryland elsewhere.

From this data Messrs. Marbury and French calculated that, during the five-year period 1915-1919, the percentage of return on the total averaged and adjusted fair value of the Company's property in Baltimore City was 9.9%, while in the balance of the State it was 1.4%. By the same process the counsel for the Association find that the net return for each year during the same period varied from 12.5% to 6.9% in Baltimore City, and from 3.4% to .02% for Maryland elsewhere. The estimates for 1920 as made by Messrs. Marbury and French from the figures of the Company are:

YEAR	Rate of Return in Baltimore City	Rate of Return Outside of City
1920 (estimated present rates)	4.3%	1.6%
1920 (estimated proposed rates)	8.5%	1.3%
1920 (actual return on first four months)	8.0%	.1%

The Association contends further that the Company has heretofore been deducting too much for depreciation on the property in Baltimore City, and if allowance for this be made and the excess not deducted from the gross return in ascertaining the net return in Baltimore City, the disparity will be much greater. It was argued by the Association's counsel that the evidence showed Baltimore City had carried the rest of the State for a number of years, that no increase in rates for Baltimore City should be made and that the Company should stand the diminished income until the Commission sees if the present conditions are likely to continue.

(b) *Objection to Local Cost Theory*

The proposition advanced by the Protective Telephone Association of Baltimore City that the rate scheme for Baltimore City should be based upon local telephone property values therein met with a storm of protests from the counties. The plan was termed "segregation" and the step called "secession." Attorneys representing the incorporated cities and towns, the Commissioners of the counties, the agricultural societies, county business men's associations, organizations of particular exchange subscribers and many individuals, by petition, letter and in person protested vehemently against the recognition of the principle advocated by the Protective Telephone Association. Arguments against the proposition were made by John S. Newman, A. D. Willard, Amos W. W. Woodcock, Vincent Sebold, A. R. Hagner, Harry Brindle, T. Hughlett Henry, W. L. Seabrook, L. E. Hafer, William C. Walsh, Charles H. McNabb, C. E. Bryan, Frank Bomberger and W. Beatty Harlan, Esqrs., who represented every section of the State and spoke for the commercial, industrial and agricultural interests of their communities. Briefs were filed by Messrs. Woodcock, Seabrook, Seabold, and Clemson. The argument and brief of Colonel Woodcock in behalf of the Chamber of Commerce of Salisbury, the Pocomoke Board of Trade, and the Mayor and City Council of Ocean City, presented forcibly the counties' contentions. Colonel Woodcock argued that the telephone property located in Baltimore City might well be regarded as for the benefit of the rest of Maryland as well as for Baltimore City; that no system of accounting could value separately the property of the telephone company located in Baltimore City which is for the sole benefit of Baltimore; that, by attempting to apportion parts of the telephone system property, you get away from facts possible to be expressed in figures. It was urged that the Company's property comprises a single telephone system, and that if the connections with the counties were severed, a large part of the earning power of the property located in Baltimore City would be lost.

In the brief of Colonel Woodcock and in the arguments of other counsel representing the counties, the figures of the Company were analysed and the conclusions drawn that the Baltimore City revenues are increased by reason of the connections with Maryland elsewhere; "that the (City) figures for fair value are right if it is not a part of a system, but the figures for revenue are too high; on the other hand, if it is a part of the system, then the figures for revenue may be right, but the figures for fair value too low."

The county representatives submitted that the rates are fair to the Company if from the schedule as a whole it gets a fair return, and fair to the people served if they pay in each particular case no more than the service is worth; that subscribers with a greater number of telephones in their local service area should pay more than those with fewer stations in their exchange area. The situation of a Baltimore subscriber with over 70,000 stations in 14 exchanges available is cited as proof that the value of the service in Baltimore City is far greater than that given the county subscriber who has an extremely limited number in his one exchange.

(c) Factors in Classification

The utility now under investigation has been subject to regulation by this Commission for more than ten years. In arriving at a decision in the present case, we fortunately have as a guide the light shed by a decade of experience with the practical results from rates that have actually been in effect. This is always desirable.

> Knoxville vs. Knoxville Water Company, 212 U. S., 1; 53 L. Ed., 371;
> Wilcox vs. Consolidated Gas Co., 212 U. S., 19; 53 L. Ed., 382;
> Omaha vs. Omaha Water Co., 218 U. S., 180; 54 L. Ed., 991; 48 L. R. A., N.S., 1092, (full note).

The conditions formerly obtaining, now existing, and so far as can be predicted, those which we may expect to arise, have been forecast by counsel and considered by the Commission. The fair value of the Company's property was the subject of an exhaustive inquiry in Case No. 690, and the subsequent additions have been examined in this case. The management of the Company and its diligence in business, in all phases, have been gone into by counsel and protestants. Judged by every test that the Commission has applied, the probable return which the Company will receive under the rates proposed does not seem to be unreasonable or unjust.

> Smythe vs. Ames, 169 U. S., 466; 42 L .Ed., 849;
> San Diego Land & T. Co. vs. City of National City, 174 U. S., 739; 43 L. Ed., 1154;
> Simpson vs. Shepherd, (Minnesota Rate Case), 230 U. S., 352; 57 L. Ed., 1151;
> Puget Sound vs. Reynolds, 244 U. S., 574; 61 L. Ed., 1325;
> Lincoln Gas & Elec. Co. vs. City of Lincoln, 250 U. S., 256; 63 L. Ed., 963.

It is, however, against the classification of the rates that the protestants chiefly complain. We are here dealing with a classification made by the Company itself, and asserted to have been formed with a view of equitably distributing the burden of the rates.

> Puget Sound vs. Reynolds, 244 U. S., 574; 61 L. Ed., 1325;
> Pa. R. R. vs. Public Service Commission, 245 U. S., 62 L. Ed., affirming Pa. R. R. vs. Towers, 128 Md., 59.

The Chesapeake and Potomac Telephone Company is the only State-wide utility under the jurisdiction of this Commission. Its lines reach every city, village and hamlet; it serves the whole people and plays a part in the pursuit

of every profession, trade and calling. We would be loath to take any step which would discourage the extension and use of an instrumentality which is so important a factor in promoting the social, economic and political integration of our State, where are operating such centrifugal influences as dividing waterways and mountain ranges, widely separated markets and marts, differing racial origins and traits, and a population almost equally divided between a great city and the farm.

The petition of the Protective Telephone Association of Baltimore City was attacked by certain representatives of the counties with a vehemence explained only by the fact that they regarded the request for a separation of the Company's property, revenues and expenses as the act of men impelled by an egoistic motive that would sacrifice State unity to pecuniary self-interest.

The county champions, who were prepared to do battle for the rural communities, were completely disarmed by the opening statement on behalf of the Association, wherein, as might be expected from public-spirited advocates of an Association composed of the best elements in our business and professional life, a splendid tribute was paid to our rural citizenship, and the development of a state, mind and spirit that lead to unified activities in all lines of endeavor was warmly advocated.

The counsel for the Association, while disclaiming that their action was inspired by any purely altruistic motive, stated that they were merely invoking well-known statute law and long established judicial decision proscribing discrimination against persons or localities.

While the Company had furnished the Commission, at the request of counsel for the Protective Telephone Association and the Baltimore Chamber of Commerce, with statements purporting to show the fair value of such Company's property in Baltimore City and Maryland elsewhere, separated, with probable revenues under the proposed schedules of rates and expenses also separated, the Commission is not convinced that these statements exactly reflect the true situation in this respect, owing in some part to the annexation to Baltimore City of certain portions of Baltimore and Anne Arundel Counties, effective January 1st, 1919, and the difficulty of making an accurate apportionment of the investment in toll lines and the revenues therefrom. These statements at the best, therefore, represent but approximations.

It was earnestly contended by advocates of the State-wide principle that if the Commission should commit itself to the correctness of the plan proposed of treating the fair value of the telephone property, the revenues therefrom and the expenses thereon as a separate unit, it could not consistently refuse upon request to make similar separations with respect to Cumberland, Hagerstown, Annapolis, Salisbury and other cities and towns of the State, down to the smallest settlement. In point of fact, counsel for several of the above cities have already demanded that if the City of Baltimore is to be considered separately, the cities which they represent should also be so considered without relation to the State as a whole.

The greater the telephone development in the State as a whole, the greater the value of the service to the individual subscriber, regardless of his location or the class of service for which he contracts. It might be said that the situation in Maryland is unique in one particular, in that in this State there is one

large city, Baltimore, which metropolis has business and social relations with the various smaller cities, towns, villages and rural sections throughout the entire State. The people of Baltimore are naturally interested in and benefited by the telephone development throughout the State as a whole, and each additional subscriber, regardless of location, increases the potential value of the service to the Baltimore subscribers. The converse of this is also true, as the subscribers throughout the State are equally interested in seeing that the telephone development of Baltimore keeps pace with the growing importance of the leading city of the State.

The statute creating this Commission provides that no telephone company shall give any unjust or undue preference or advantage in rates, nor subject any person, corporation or locality to any unfair prejudice or disadvantage.

Public Service Commission Law, Sec. 40.
Bagby's Code, Vol. 2, Article 23, Sec. 454.

The Commission, in examining the classification adopted by the Company, finds a reasonable basis for the different gradations; that the schedule exhibits no element of arbitrary division, and gives no unjust or undue prejudice or advantage in rates to any person, corporation or locality.

The Commission finds these schedules of proposed rates throughout the State of Maryland not unduly discriminatory, and with the reductions hereinafter referred to, which do not materially alter the general plan, constitute a reasonably equitable distribution of the burden of the Company's required revenues among the various localities and classes of subscribers throughout the State. Should our investigation have disclosed the proposed classification to be in fact unduly discriminatory, we would have been required to relieve any locality or class of subscribers upon whom the burden bore unduly, as the wording of the statute is clear, the principle of decision plain, and the Commission's path of duty straight.

St. Louis & San Francisco R. Co. vs. Gill, 156 U. S., 649;
Northern Pacific vs. North Dakota, 236 U. S., 585; 59 L. Ed., 735;
N. & W. Ry. Co. vs. Conley, 236 U. S., 605; 59 L. Ed., 745;
Puget Sound vs. Reynolds, 244 U. S., 574; 61 L. Ed., 1325;
Groesbeck vs. Duluth S. S. & R. R. Co., (U. S. Supreme Court Advance Opinions, No. 2, p. 16).

(d) *Suggestions for Rate-Making*

Various counsels and protestants in this case advocated widely differing methods of fixing the charges for telephone service. Mr. F. Lincoln Hutchins, the statistician, found a likeness in telephone communication to the postal service and suggested that after the Commission had determined the revenue requirements of the Company, there be fixed a rental for each telephone based on the readiness-to-serve cost, that the balance be divided by the number of messages originating throughout the entire State, and that this sum be charged for each message, irrespective of distance, within the limits of the State. Attractive as such a plan seems, and simple as it would undoubtedly be in operation, one objection that prevents its adoption is that the average cost per message would be so high as to be a serious deterrent to the use of the telephone for local messages.

Among other plans advocated was that the Commission should endeavor to find and establish a unit of service comparable to the ton-mile used in freight rate-making. With this as the standard the rate schedule applicable throughout the State would be a matter of mere mathematical calculation. The Company's experts confessed that they had been diligently seeking such a unit for many years, but alleged that the search had been fruitless. Messrs. Hagner of Hagerstown, Newman of Frederick, Seabrook of Westminister, Hafer of Taneytown, and numerous individuals throughout certain counties, strenuously urged the Commission to restore the extended local service areas, which they enjoyed prior to the establishment of the Postmaster-General's rates, so that subscribers might again talk between several different exchanges without paying toll charges. It developed during the hearing that this plan had been adopted in only a few counties in the State, and that the restoration of such plan would place an unequal share of the expense on the communities not enjoying such privilege.

It was recommended by Colonel Woodcock that the fair rate for a local service area with a definite number of telephones be determined, due consideration being given to the cost of service in the locality and in the State, and with this rate so fixed as a basis, then subscribers with a greater number of telephones in their local service area be charged more, and those with fewer telephones available to them be charged less, the rates not being in direct proportion to the number of telephones but rather graded according to the increased or decreased service value. As will be shown later, this scheme differs but slightly from the one employed by the Company.

(e) *Company's Plan*

The classification of local rates throughout the counties, prior to May 1st, 1919, was merely a continuation of the inequalities that grew up with the piecemeal development of the local and State-wide telephone service. The rates bore no direct relation to the value of the service, the cost of the service, or any other scientific consideration. In some sections exchanges were given without toll charge, extensive communication with other and distant offices, while most of the localities did not enjoy this privilege. All charges in the counties were based on flat rates that varied for the different kinds of service but without any consideration being given to the number of calls made. During the period of Federal operation, the Postmaster-General put into effect new rate schedules throughout the State of Maryland. The underlying principle of the plan established by order of the Postmaster-General was that, so far as practicable, all telephones connected with a given exchange should constitute a local service area, and communication between the subscribers in such local service area should be unlimited and the service at a flat rate, the rates varying broadly according to the class of service and number of telephones in the area. Between the different local service areas toll charges applied. When the return to private ownership of the telephone properties had been directed and the Company had petitioned the Commission for approval of a schedule conforming the Postmaster-General's rates, considerable objection was raised to the continuance of the toll feature between local exchanges, as well as to the

increase that had been made in the initial rates. An account of the several steps taken to defeat the Company's petition and a recital of the proceedings which resulted in the filing of a new and additional schedule by the Company have been already given.

In support of its petition and rate schedule the Company's General Commercial Superintendent, Mr. W. B Clarkson, introduced and explained the following exhibits:

Nos. 1 to 4, showing the present and proposed rates for Baltimore City;

Nos. 5 to 9, showing the present and proposed rates for Maryland elsewhere;

No. 10, analysis of toll traffic between points where toll charges were introduced May 1st, 1919;

Nos. 11 to 16, statements referring to service-connection charges and station-move charges.

During the course of the hearing Mr. Clarkson, at the request of counsel and the Commission, prepared and filed the following additional exhibits:

No. 17, average originating calls per day in Baltimore and Salisbury for purposes of comparison;

No. 18, comparison of Baltimore City rates with rates in Cleveland, Detroit, Pittsburgh and Washington;

No. 19, three maps of Maryland so marked as to show (a) central office district boundaries; (b) free local areas prior to May 1st, 1919; (c) free service areas at the present time;

No. 20, alternative rates giving same free local service area obtained prior to May 1st, 1919; and rates if free service area be extended for the entire county (seven counties calculated);

No. 21, comparison of rates for representative towns in Maryland elsewhere with similar exchanges in other States.

Each of the above exhibits was analyzed and discussed by counsel for the protestants and the Commission.

In the course of his testimony and cross-examination, Mr. Clarkson explained that the Company's plan was based on the theory that its total revenue requirements must be obtained from rates, and that by charging tolls for service between exchanges, it would be possible to give purely local service at the minimum charge, and thereby encourage the general use of the telephone throughout the State.

(f) *Application of Company's Rule*

It was explained by the Company's witness that in applying the rule explained above, the minimum rate is first ascertained for the lowest grade of service in the class of exchanges reaching the smallest number of subscribers. With this minimum rate as a basis the other rates are graded upwards with

reference to the kind of service contracted for and the number of subscribers in the area. The following rates found in the Company's exhibits, Clarkson Nos. 1 and 5, illustrate the application of the principle.

	Smallest County Exchange	Largest County Exchange	Baltimore City
Residence—			
Four-Party and Rural—Flat Rate	$2.00	$2.50	None
Individual Line—Flat Rate	2.75	3.50	5.50
Business—			
Four-Party and Rural—Flat Rate	3.00	3.00	None
Individual Line—Flat Rate	3.50	5.00	None
Residence and Business—			
Individual Line—Message Rate	------	------	*9.20

In attempting to arrive at a full understanding of the effect of a return to the previous extended local service areas, the Company, at the request of the Commission, filed alternative schedules for service under the same free areas that obtained before the Postmaster-General's rates went into effect on May 1st, 1919, and another alternative which would permit of free service throughout each county. The Company's witness, in presenting such alternative schedules, drew attention to the theory of rate-making under which its proposed rates for the State as a whole had been prepared, based on the value of the service as measured by the number of telephones that the subscriber might reach without toll charge. It was stated that this could not be followed in preparing rates for restoring the former service areas, because in certain sections there had never been such extended privileges, no demand existed for them, and further, that such service is more costly then exchange service, as it involves additional operating labor and requires additional equipment, wires and poles to connect the exchanges. Hence, it would be unfair to distribute throughout the State the burden of this additional expense, when its advantages would be enjoyed only by certain communities. The optional rates were obtained by adding to the originally proposed rates the cost of the extended service in each exchange affected. The counsel opposing the restriction of the free service area seemed disinclined to accept these higher alternative rates.

VII

CONCLUSIONS CONCERNING RATES AND SERVICE

(a) *County and City Rates*

Because of the widely divergent views as to the proper classification of rates throughout the State and especially regarding the merits of the plea for the restoration of the former free service areas to those communities which had enjoyed this special privilege, the Commission made an earnest effort to comply

* Based on initial rate of $4.00 plus average excess messages of $5.20 per month.

with local demands and at the same time to formulate a fair schedule which would distribute among the localities of the State and the individual subscribers, as equitably as such a complex problem will permit, the burden of the revenue requirements of the Company; and in attempting to find the proper solution, the Commission has always had in mind the healthy promotion of the telephone business and the ultimate extension of service at the lowest possible cost to every section of the State. A check on the use of service between points in the largely extended local service areas which previously existed, the restoration of which was asked by protestants from these communities, was made by the Company and the results are shown on the Exhibit, Clarkson No. 10. This test showed that a very small percentage of the subscribers had used from one-half to three-fourths of the total number of calls between such points.

In studying the effects that would follow a compliance with the request made by certain citizens, that county-wide service be given, the Commission had the Company prepare a schedule of rates based on this plan. It was easily seen that the rates were prohibitive except to the few users who demand such extended service and would compel the average subscriber to pay more than the service which he required and used would be worth. In further attempting to meet the demands of certain protestants, the Commission tried to formulate a rate scheme affording to all subscribers in the county free connection with the County-seat. This plan involved an increase in the rates and met with objection because the privilege to talk with the County-seat is not a universal desire. It was pointed out that in Prince George's County the Laurel subscribers would prefer to talk to other points rather than to Upper Marlboro. The delegation from Churchville differed among themselves as to the relative value of Aberdeen, Darlington, Havre de Grace and Bel Air, as the most desirable point to which free communication should be given. Protestants from Carroll County suggested that some subscribers on the Mount Airy Exchange would not care to pay the increased cost occasioned by the extension of the privilege to communicate with Westminster, but that certain telephone users in Frederick County attached to the Mount Airy Exchange might prefer to talk to Frederick City; those living in Howard County might ask for free connection with Ellicott City and others whose business interests are outside of the County of their residence might prefer Damascus in Montgomery, Buckeystown in Frederick, or Sykesville in Carroll. It was apparent that some communities are self-centered and are content with the local exchange area, but that other communities desired free telephone connection with the economic center rather than with the political center, and that there was by no means either a unanimous or even majority agreement on the point most desirable.

If by any possible test the Commission could determine the preponderating opinion of a community with respect to the point with which it desires to have free communication, it might entail a regrouping of the subscribers' lines into entirely new exchange areas. The Company asserts that if it were entering Maryland as a virgin field, it could devise no plan for locating exchanges more advantageous to the public than the present arrangement; and that experience has demonstrated that in making the present locations, which were in almost

all instances selected by the Company in compliance with local demand and need, or by the people of the communities themselves in building mutual or local exchanges afterwards absorbed by the Company, the needs and desires of the majority of the subscribers were satisfied.

Believing that a very large number of the County users do not avail themselves of the extended usage beyond the central office area, and also realizing that a small number of subscribers are very extensive users, the Commission is of the opinion that the basis of rate classification on service value should be the number of telephones in the central office area, and that the existing variations from this plan should be discontinued. This will enable the exchange rates to be reduced to a minimum, bringing telephone service within the means of more people in the State, and will place the cost of toll service upon the subscribers who use it. The Commission is not willing, however, to accept the classification that the Company has made nor to permit the continuance of service between exchanges, without toll.

In grouping exchanges, the Company (Clarkson Exhibit No. 5) made four different classes. The Commission is of the opinion that in service value to the subscribers, the difference is too great between the minimum and the maximum number of stations in the third and fourth classes, and has decided to grade the exchanges under seven heads. The following is a tabulation of the classes as proposed by the Company, and those adopted by the Commission:

Class	Proposed by Company	Adopted by Commission
1	Over 4,000 telephones	Over 4,000 telephones
2	2,000 to 4,000 "	2,000 to 4,000 "
3	900 to 2,000 "	1,000 to 2,000 "
4	Less than 900 "	500 to 1,000 "
5		250 to 500 "
6		100 to 250 "
7		Less than 100 "

In judging the reasonableness of the rates for these seven classes, the Commission gave consideration to the serious complaints from the rural lines' subscribers, which grievances concerned not only the restriction of the free service area but also the difficulties experienced by the subscriber in obtaining service because of the large number of users on each line or circuit.

Our conclusions in this respect are that the proposed rates for the lower grades of service in the smaller communities are too high, when tested by the value of the service. The Commission, therefore, has reduced considerably the monthly charges for the lower grades of service in the smaller communities. On the other hand, some advances have been made in the rates for business subscribers and also for individual line residence subscribers. The Commission feels that the heavy usage made by these classes should be paid for by them and, in so doing, relieve the burden on the smaller users. The Commission is very much inclined towards the establishment of only measured service for business subscribers in the counties, such as obtains in Baltimore City, but until the results of the operation of the changes now made can be studied, it has been decided to inaugurate this principle by giving individual line residence

and business subscribers the option of measured rate or flat rate service. In order to meet the needs of those subscribers whose calls are comparatively few in the local area but considerably more numerous to other communities, the optional message rate for individual line business and residence subscribers will entitle the subscriber, for a minimum amount monthly, to fifty or less local messages per month and any difference between this allotment of local messages and the actual local usage may be used also to pay charges for toll messages terminating in other exchanges within the county. In applying these toll charges to the initial rate, toll charges will be equated to local messages on the basis of one local message to each five cents or fraction thereof of the toll charge, not including the war tax.

In the rate schedules which the Company proposed for Baltimore City, the individual line, message rate service, business or residence, and the first trunk line of message rate private branch exchanges were to be increased from $3.50 to $4.00 per month, for 50 or less local messages; on excess messages the proposed increase ranged from ½ cent to 1 cent each. The Commission is of the opinion that the proposed rate, taking into account the number of local messages allowed, is too high, and have considered the adoption of either of two means of adjustment—the lowering of the initial rate or the allowance of a greater number of local messages at the proposed rate. Our conclusion is that, since a number of the subscribers do not now require over 50 messages a month, the change which would benefit the greatest number of subscribers should be made, and we have, therefore, concluded that the minimum rate of $3.50 for 50 messages should not be increased, but have allowed the increase asked for on local messages in excess of 50 per month.

With this modification in the new schedules, the rate for two-party business service as proposed is inconsistent. The Commission, therefore, will fix the rate for that class of service, which is now $2.50 per month for 40 or less local messages, at $2.75. The Company's proposed rate was $3.00 per month.

The remaining rates suggested by the Company appear, after careful investigation and consideration by the Commission, not to be unreasonable.

(b) *Earnings Under the Rates Established*

The Company asked for increases in rates estimated to aggregate $735,760 per annum. The rates we are about to establish will reduce this amount by $134,014, leaving an estimated increase of $601,746. Under these new rates expenses and deductions will increase only $86,317 instead of $102,279 under the rates proposed by the Company. The former amount deducted from the increase in gross revenues of $601,746 will give an increase in net revenue of $515,429, which sum added to the $400,000 estimated net revenue under the existing rates will yield the Company a net distributable income of $915,429, which is equivalent to a return of 5.30% upon the estimated average fair value for 1920 of $17,250,000.

(c) *Service Connection Charges*

During the period of Federal control, there were established generally throughout the country "service connection charges," to apply on new installations of equipment, or removals thereof from one location to another, or

changes in names of subscribers using the same telephone installations. These charges so established superseded the charges theretofore made for certain forms of removals and are also in lieu of certain charges previously assessed where the subscriber contracted for service for a period of less than one year, or, having contracted for service for a year, surrendered the contract before the expiration of such period.

There was offered in evidence a statement (Clarkson Exhibit No. 11) showing the revenues which had accrued to the Company from new installations and outside removals in Maryland, including Baltimore City, during the year 1919, amounting to $98,781.33 during such period. If the service connection charges are to be eliminated, some additional source of revenue must be sought in order to replace this amount. The Commission will not finally pass upon either the propriety or reasonableness of the service connection charges at this time, but will permit the continuance of such charges for the present. The Commission may hereafter find it necessary or desirable to docket a separate case in order to develop fully the questions involved by the service connection charges, but until this is done the Commission will refrain from passing final judgment thereon.

(a) *Service*

Numerous complaints alleging poor service have been received from people throughout the State. Letters have been received from people whose judgment is not doubted or motives questioned by the Commission, complaining in this respect, and the Commission is of the opinion that the service furnished by the Company has been unsatisfactory.

Most of the protests filed in these proceedings have been predicated upon, or accompanied by, complaints of the poor quality of telephone service, and in the main, the complainants and protestants have not questioned the right of the Company to earn a fair return on the fair value of its property used and useful in the public service, but they have objected to paying increased charges for the alleged poor service.

The Company, in defense of its service, has presented to the Commission various checks and tests, which tend to show a reasonable degree of efficiency in operation, and which also show that the service in Maryland compares favorably with that furnished in other communities. It is shown of record that the quality of service in the City of Baltimore also compares favorably with that of the service furnished in other large cities of the nation.

In its investigation the Commission made attempts to ascertain the causes resulting in the conditions complained of, and it appears that there has been an abnormally large turnover of exchange operators during the war period, which the Company explained as being due in large part to its inability to keep pace with the wage scales of other industries employing the same classes of labor. Apparently the Company realizes the importance of correcting this condition, and is now making a comprehensive study of the situation with the view of removing the causes for such turnover, so far as possible. The Company has

already put into effect new wage scales for its operators and training schools for such employees, who are now paid during the course of instruction, and it is believed that these steps should help largely to correct the labor condition.

The Company is reminded, however, that the final test of the reasonableness of rates is the value of the service furnished, and the Commission's approval of the rates herein granted is given with the distinct understanding that the Company will make every effort to render service of the highest efficiency.

The rates established by our order will become effective on September 1st, 1920, and remain in effect until December 31st, 1921. Should it be deemed necessary to continue them beyond such date, the Commission will enter such further order in the premises as may be necessary. During this period the Commission will require the Company to render monthly reports showing the operating revenues and expenses under the rates herein established, the Commission expresly reserving the right to enter such further order or orders as may be justified by the showing presented by such statements. The Commission will also make checks upon the quality of service being supplied by the Company, and will endeavor to keep in close touch with the situation in every respect.

Should it be convinced by its investigation and studies during this period that the service being furnished does not measure up to the standard which the Commission has set, and which the Company apparently recognizes as what the public is entitled to receive, the Commission will not permit the rates herein authorized to remain effective beyond the original expiration date, i. e., December 31st, 1921, but will require the Company to establish such lower rates as may be deemed warranted by the quality of service supplied.

An order will be entered in accordance with the conclusions herein.

ORDER No. 5731

In the Matter of The Application of THE CHESAPEAKE AND POTOMAC TELEPHONE COMPANY OF BALTIMORE CITY for Permission and Authority to File and Publish a Schedule of Rates to be Effective Upon the Return of the Petitioner's Telephone System to It by the United States Government.	Before the Public Service Commission of Maryland Case No. 1709

This case having been duly heard and submitted by the applicant, The Chesapeake and Potomac Telephone Company of Baltimore City, and by the several protestants, and full investigation of the matters and things involved having been had and the Commission, on the date hereof, having rendered and filed an opinion containing its findings of fact and conclusions thereon, which said opinion is hereby referred to and made part hereof.

IT IS, THEREFORE, This 18th day of August in the year Nineteen Hundred and Twenty, by the Public Service Commission of Maryland,

ORDERED, (1) That the fair value for rate-making purposes of the property of The Chesapeake and Potomac Telephone Company of Baltimore City in the State of Maryland is hereby declared to be Sixteen Million, Seven Hundred and Twenty-five Thousand, Five Hundred and Thirty-two Dollars ($16,725,532) as of December 31, 1919, and such valuation shall be and become final unless protest against the same shall be filed with the Commission within ten (10) days from the date of this order, as provided by Section 30 of the Public Service Commission Law.

(2) That The Chesapeake and Potomac Telephone Company of Baltimore City be and is hereby directed and required to file with the Commission not later than September 1st, 1920, schedules of rates and charges for telephone service in the State of Maryland, and thereafter to charge for such service in accordance with such schedules, as follows:

BALTIMORE CITY

MESSAGE RATE

	Monthly Rates
Individual Line (Business or Residence)	
Fifty or less local messages per month	$3.50
Next 100 local messages per month, each	.05
Next 100 local messages per month, each	.04
All over, each	.03

	Monthly Rates
Individual line with Coin Collectors (Semi-Public)	
Fixed monthly charge	1.75
Daily guarantee in local messages at 5c. each	.15
Minimum rate	6.25
Additional local messages, each	.05
Two-Party Line (Business)	
Forty or less local messages per month	2.75
Additional local messages, each	.05
Two-Party Line (Residence)	
Thirty-five or less local messages per month	2.50
Additional local messages, each	.05
Extension Stations (Business or Residence)	
Each	.50
P. B. X. Systems (Business or Residence)	
Switchboards—	
Cordless switchboard and operating set	1.50
Non-multiple cord switchboard and operating set, per position	2.00
Multiple cord switchboard and operating set, per position	10.00
Multiple jacks, each	†.01½
Stations—	
Each	.50
Intercommunicating Stations—	
Main station with 10-point push-button switch	1.00
Additional stations with 10-point push-button switches, each	1.00
Stations with 20-point push-button switches, each	1.25
Stations with 30-point push-button switches, each	1.50
Stations without push-button switches, each	.50
Installation charge	‡
Trunk Lines—	
First trunk (including 50 or less local messages per month)	3.50
Additional trunks, each	2.00
Local Messages—(In excess of first 50 per month)	
Next 100 per month, each	.05
Next 100 per month, each	.04
All over, each	.03
Coin Boxes—(In connection with M. R. P. B. X. Stations)	.25
Listings—	
Listing of permanent guests on hotel or apartment house private branch exchange systems, each	.25
FLAT RATE	
Individual Line (Residence)	
Each	$5.50

	Monthly Rates
Extension Stations (Residence)	
Each	.75
Intercommunicating Systems (Residence)	
Trunk Lines—	
Each	8.25
Stations—	
Main station with 10-point push-button switch	1.25
Additional stations with 10-point push-button switches, each	1.25
Stations with 20-point push-button switches, each	1.50
Stations with 30-point push-button switches, each	1.75
Stations without push-button switches, each	.75
Installation charge	‡

NOTES

* This rate is for switchboards of 10 lines or less in use (including trunks). For larger switchboards up to 320 lines in use, the rate varies from $8.00 per month per position to $9.00 per month per position, as follows:

11— 30 lines in use, per position	$8.00
31— 60 lines in use, per position	4.00
61—100 lines in use, per position	5.00
101—150 lines in use, per position	6.00
151—200 lines in use, per position	7.00
201—260 lines in use, per position	8.00
261—320 lines in use, per position	9.00

†Charge for each multiple station and trunk jack in excess of 1 per line (in strips of 10 jacks).

‡The subscriber is charged for the cost of cable installation in excess of an average of $5.00 per station.

MARYLAND ELSEWHERE, EXCEPT WASHINGTON SUBURBAN

Monthly Rates

	*Message Rate, Business or Residence Indiv. Line	FLAT RATES Business Indiv.	Business 2-Party	Business 4-Party	Business Rural	Residence Indiv.	Residence 2-Party	Residence 4-Party	Residence Rural
Class 1 (over 4,000 stations)	$3.50	$5.00	$4.00	†$3.00	$3.00	$3.75	$3.00	$2.50	$2.50
Class 2 (3,000-4,000 stations)	3.50	4.50	3.75	†3.00	3.00	3.50	3.00	2.50	2.25
Class 3(1,000-3,000 stations)	3.50	4.25	.....	3.00	2.75	3.25	.....	2.25	2.00
Class 4 (500-1,000 stations)	3.50	4.00	.....	2.75	2.50	2.75	.....	2.00	1.75
Class 5 (250-499 stations)	3.50	3.50	.....	2.50	2.25	2.50	.....	1.75	1.50
Class 6 (100-249 stations)	3.50	3.00	.....	2.00	1.75	2.00	.....	1.50	1.25
Class 7 (less than 100 stations)	3.50	2.75	.....	1.75	1.50	2.00	.....	1.25	1.00

*Fifty or less local messages per month; additional local messages 5 cents each. The allotment of local messages will also be used to pay charges for toll messages within the county; one local message for each 5 cents, or part thereof, of the toll charge, not including war tax.

†Message rate: 50 or less local messages per month; additional local messages 5 cents each.

These exchange rates entitle subscribers to telephone service, without toll charge, in the central office district with which the subscriber is connected, and toll charges will apply on telephone messages to points connected with other central offices, except that no toll charge will apply on messages between theoretical exchanges served from the same central office.

LIST OF EXCHANGES, WITH CLASS NUMBERS

Aberdeen	5	Frederick	2
Annapolis	2	Frostburg	4
Arnilger	6	Gaithersburg	5
Back River	6	Galena	7
Bel Air	4	[4] Glenburnie	6
Berlin	6	Great Mills	7
Betwyn	6	Greensboro	6
Bethesda	6	Hagerstown	1
[1] Blaine	7	Hampstead	5
Boulevard	3	Hancock	6
Bowie	6	Havre de Grace	5
Braddock Heights	6	Highfield	6
Brandywine	6	Hillsboro	7
Brunswick	5	Hurlock	5
Buckeystown	5	Hyattsville	4
Cambridge	3	Jarrettsville	6
Cardiff	5	Keedysville	5
Catonsville	4	Kensington	5
Cecilton	7	[3] Keyser	3
Centreville	5	Lansdowne	7
Chase	7	La Plata	7
Chesapeake City	6	Laurel	5
Chestertown	4	Leonardtown	6
Churchville	6	Lonaconing	5
Clear Spring	6	Mechanicsville	6
Cockeysville	5	Middletown	5
Crisfield	5	Millington	7
Cumberland	1	Mt. Airy	5
Damascus	6	Mt. Savage	6
Darlington	6	Myersville	6
Delmar	6	New Market	6
Denton	5	New Windsor	5
Easton	4	North East	6
[5] Elkridge	4	Oakland	5
Elkton	4	Ocean City	7
Ellicott City	4	[6] Oriole	7
Emmitsburg	6	Oxford	7
Evergreen	2	Parkton	6
Federalsburg	6	[2] Patapsco	5
Fork	6	Perryville	6

[4] Piedmont	3	Snow Hill	5
Pikesville	4	Sparrows Point	4
Pocomoke	5	Still Pond	6
Port Deposit	6	Sykesville	4
Preston	6	Taneytown	5
Prince Frederick	5	Thurmont	6
Princess Anne	6	Tilghman	7
[5] Prospect	4	Towson	4
Queenstown	6	Union Bridge	5
Reisterstown	5	Upper Marlboro	5
Ridgely	6	Walkersville	6
Rock Hall	6	Warwick	4
Rockville	5	Westminster	3
St. Michaels	6	West River	5
Salisbury	3	Williamsport	6
Sandy Springs	5	Wilna	6
Severna Park	7	Woodlawn	6
Sharptown	7	Woodside	5
Smithsburg	5	Woodstock	7

Since the passage of the within order, the *following changes have been made:*

NEW EXCHANGES

Deal Island, class numeral	7
Linthicum, class numeral	6

CHANGES IN EXCHANGE NAMES

[1] Blaine changed to Kitzmiller, class numeral same;
[2] Patapsco changed to Dundalk, class numeral same;
[3] Keyser changed to McCoole, class numeral same;
[4] Piedmont changed to Westernport, class numeral same;
[5] Portion of subscribers in these exchanges now served through new exchange, Linthicum;
[6] Oriole exchange abandoned—part of subscribers now served through Princess Anne and a portion through new exchange, Deal Island.

	Monthly Rates
Flat Rate Extension Stations (Business)	$1.00
Message Rate Extension Stations (Business or Residence)	.50
Private Branch Exchange Systems (Business)	
Switchboards—	
Cordless switchboard and operating set	$1.50
Non-multiple cord switchboard and operating set, per position	* 2.00
Multiple cord switchboard and operating set, per position	10.00
Multiple jacks, each	†.01½

	Monthly Rates
Stations—	
Each	1.00
Intercommunicating Stations—	
Main station with 10-point push-button switch	1.50
Additional stations with 10-point push-button switches, each	1.50
Stations with 20-point push-button switches, each	1.75
Stations with 30-point push-button switches, each	2.00
Stations without push-button switches, each	1.00
Installation charge	‡
Trunk Lines—	
Trunks (two-way), each	Indiv. Line, Bus. Rate plus 50%
Trunks (inward service only), each	Indiv. Line, Bus. Rate less 25%

Intercommunicating Systems (Residence)

Stations—	
Main station with 10-point push-button switch	$1.00
Additional stations with 10-point push-button switches, each	1.00
Stations with 20-point push-button switches, each	1.25
Stations with 30-point push-button switches, each	1.50
Stations without push-button switches, each	.50
Installation charge	‡
Trunk Lines—	
Trunks (two-way), each	Indiv. Line, Res. Rate plus 50%
Trunks (inward service only), each	Indiv. Line, Res. Rate less 25%

Auxiliary Line and Station

In connection with Individual Line Business Service, Three-quarters of the Indiv. Bus. Rate

Mileage Charges

Exchange Line Mileage—

(Per ¼ mile or fraction, air line)

Individual line	$.75
Two-Party Line	.412-3
Four-Party Line	.25

Extension and Tie Line Mileage—

Between points in the same local area, for each ¼ mile or fraction, route measurement (max. twice air line)	.75
Between points in different local areas, for each ¼ mile or fraction, route measurement	1.20

Private and Leased Line Mileage—

Between points in the same local area, for each ¼ mile or fraction, route measurement (max. twice air line)	.75
Between points in different local areas, for each ¼ mile or fraction, route measurement	1.20

Service Stations—

When instrument is owned and maintained by subscriber—

Business stations, each,.....1-3 Rural Line Bus. Rate

Residence stations, each,

1-3 Rural Line Res, Rate, min. .41 2-3 per month

NOTES

* This rate is for switchboards of 10 lines or less in use (incl. trunks). For larger switchboards up to 320 lines in use, the rate varies from $3.00 per month per position to $9.00 per month per position, as follows:

11— 30 lines in use, per position	$3.00
31— 60 lines in use, per position	4.00
61—100 lines in use, per position	5.00
101—150 lines in use, per position	6.00
151—200 lines in use, per position	7.00
201—260 lines in use, per position	8.00
261—320 lines in use, per position	9.00

† Charge for each multiple station and trunk jack in excess of 1 per line (in strips of 10 jacks).

‡ The subscriber is charged for the cost of cable installation in excess of an average of $5.00 per station.

WASHINGTON SUBURBAN

(See order No. 7176, appended, modifying rates for this territory)

MESSAGE RATE

	Monthly Rates
Individual Line (Business or Residence)	
Fifty or less local messages per month	$4.00
Next 100 local messages per month, each	.05
Next 50 local messages per month, each	.04½
Next 50 local messages per month, each	.04
Next 50 local messages per month, each	.03½
All over, each	.03
Individual Line with Coin Collector (Semi-Public)	
Fixed monthly charge	1.75
Daily guarantee in local messages at 5c. each	.15
Minimum rate	6.25
Additional local messages, each	.05
Two-Party Line (Business)	
Forty or less local messages per month	3.00
Additional local messages, each	.05
Two-Party Line (Residence)	
Thirty-five or less local messages per month	2.50
Additional local messages, each	.05
Extension Stations (Business or Residence)	
Each	.50
P. B. X. Systems (Business or Residence)	
Switchboards—	
Cordless switchboard and operating set	$1.50

	Monthly Rates
Non-multiple cord switchboard and operating set, per position	*2.00
Multiple cord switchboard and operating set, per position	10.00
Multiple jacks, each	†..01½
Stations—	
Each	.50
Intercommunicating Stations—	
Main station with 10-point push-button switch	1.00
Additional stations with 10-point push-button switches, each	1.00
Stations with 20-point push-button switches, each	1.25
Stations with 30-point push-button switches, each	1.50
Installation charge	‡
Trunk Lines—	
First trunk (including 50 or less local messages per month)	4.00
Additional trunks, each	2.00
Local Messages (in excess of first 50 per month)—	
Next 100 per month, each	.05
Next 50 per month, each	.04½
Next 50 per month, each	.04
Next 50 per month, each	.03½
All over, each	.03
Listings—	
Listing of permanent guests on hotel or apartment house private branch exchange systems, each, per month	.25
FLAT RATE	
Individual Line (Residence)	
Each	* 5.50
Extension Stations (Residence)	
Each	.75
Intercommunicating Systems (Residence)	
Trunk Lines—	
Each	8.25
Stations—	
Main station with 10-point push-button switch	1.25

*By terms of Commission's Order No. 7176, appended, this rate was authorized to be changed to $5.00, effective December 1st, 1922.

Additional stations with 10-point push-button switches, each	$1.25
Stations with 20-point push-button switches, each	1.50
Stations with 30-point push-button switches, each	1.75
Stations without push-button switches, each	.75
Installation charge	‡
Mileage	
Extension and Tie Line Mileage—	
Per quarter mile	1.00
Private and Leased Line Mileage—	
Per quarter mile	1.20

NOTES

*This rate is for switchboards of 10 lines or less in use (including trunks). For larger switchboards up to 320 lines in use, the rate varies from $8.00 per month, per position, to $9.00 per month, per position, as follows:

11— 30 lines in use, per position	$8.00
31— 60 lines in use, per position	4.00
61—100 lines in use, per position	5.00
101—150 lines in use, per position	6.00
151—200 lines in use, per position	7.00
201—260 lines in use, per position	8.00
261—320 lines in use, per position	9.00

†Charge for each multiple station and trunk jack in excess of 1 per line(in strips of 10 jacks).

‡The subscriber is charged for the cost of cable installation in excess of an average of $5.00 per station.

Toll Rates

Between points in the State of Maryland where the initial rate for calls placed on the station-to-station basis is 15 cents, the rate for calls from subscriber stations placed on the station-to-station basis shall be 14 cents for the initial period, the 15-cent rate to be applied only on calls from public telephones. The rates at present charged on calls from subscriber stations for person-to-person and appointment and messenger call service between such points will continue as heretofore.

(3) That except as hereinbefore modified or changed, the rates and charges for telephone service furnished in the State of Maryland by The Chesapeake and Potomac Telephone Company of Baltimore City in effect on the date hereof, be and they are hereby declared to be the just and reasonable rates and charges for said Company during the period this order remains in effect.

(4) That all charges hereinbefore prescribed for messenger rate telephone service are on monthly basis of settlement, with no allowance or adjustment for unused messages during any month or months.

(5) That this order shall become effective on September 1st, 1920, and shall remain in effect until midnight of December 31st, 1921, unless earlier modified or changed by the Commission.

(6) That The Chesapeake and Potomac Telephone Company of Baltimore City shall furnish this Commission accurate and complete statements under oath, and in convenient form, setting forth the revenues, operating expenses, and other expenditures of the Company during each month; such reports to be furnished as soon as may be reasonably practicable and convenient after the end of each calendar month during the period this order remains effective.

(7) That a copy of this order and a copy of the opinion hereinbefore referred to and filed herewith be served upon said The Chesapeake and Potomac Telephone Company of Baltimore City, and that said Company within ten (10) days of the date of service of such copy shall notify the Commission in writing whether or not it will accept and abide by the same.

WILLIAM M. MALOY,
JAMES C. LEGG,
J. FRANK HARPER,
Commissioners.

ORDER No. 6531

In the Matter of The Application of THE CHESAPEAKE AND POTOMAC TELEPHONE COMPANY OF BALTIMORE CITY for permission and Authority to File and Publish a Schedule of Rates to be Effective Upon the Return of the Petitioner's Telephone System to It by the United States Government.	Before the Public Service Commission of Maryland Case No. 1709

WHEREAS, this Commission by its Order No. 5731 entered herein on August 18th, 1920, authorized and directed rates and charges to be charged and collected by The Chesapeake and Potomac Telephone Company of Baltimore City for telephone service furnished by the said Company in the State of Maryland on and after September 1st, 1920, to and including December 31st, 1921; and

WHEREAS, the said The Chesapeake and Potomac Telephone Company of Baltimore City has filed with the Commission a petition praying that the Commission continue in effect beyond December 31st, 1921, the rates and charges so authorized and directed to be charged and collected by the said Company by the aforesaid Order No. 5731; and

WHEREAS, the petition having come on to be heard on December 16th, 1921, after due notice, and it appearing from the testimony offered and the exhibits filed at the hearing had on that date that the net telephone revenues of The Chesapeake and Potomac Telephone Company of Baltimore City under the rates and charges aforesaid equated to a rate of return of 5.63% during the year ended August 31st, 1921, and of 5.82% during the year ended October 31st, 1921, upon the tentative average fair value of the property of The Chesapeake and Potomac Telephone Company of Baltimore City during the year ended on the respective dates, which said tentative average fair value is reached by taking as the base the fair value of the property of The Chesapeake and Potomac Telephone Company of Baltimore City heretofore established by the Commission as $16,725,532 as of December 31st, 1919, and adding thereto capital additions and deducting therefrom capital retirements; and

WHEREAS, it being the opinion and finding of the Commission after investigation and hearing that the aforesaid rates and charges should be continued in effect,

IT IS, THEREFORE, this 17th day of December, in the year Nineteen Hundred and Twenty-one, by the Public Service Commission of Maryland,

ORDERED: (1) That the rates and charges authorized and directed by the Commission's Order No. 5731 entered herein on August 18th, 1920, to be charged and collected by The Chesapeake and Potomac Telephone Company

of Baltimore City for telephone service furnished by the said Company in the State of Maryland be, and they hereby are continued in effect from midnight of December 31st, 1921, until midnight of March 31st, 1923, unless in the meantime this order shall be modified or abrogated, in whole or in part, by the Commission.

(2) That The Chesapeake and Potomac Telephone Company of Baltimore City shall furnish this Commission accurate and complete statements under oath, and in convenient form, setting forth the revenues, operating expenses and other expenditures of the Company during each month; such reports to be furnished as soon as may be reasonably practicable and convenient after the end of each calendar month during the period this order remains effective.

(3) That a copy of this order be served upon said The Chesapeake and Potomac Telephone Company of Baltimore City, and that said Company within ten (10) days of the date of service of such copy shall notify the Commission in writing whether or not it will accept and abide by the same.

WILLIAM M. MALOY
J. FRANK HARPER
EZRA B. WHITMAN
Commissioners.

ORDER No. 7176

In the Matter of The Application of THE CHESAPEAKE AND POTOMAC TELEPHONE COMPANY OF BALTIMORE CITY for Permission and Authority to File and Publish a Schedule of Rates to be Effective Upon the Return of the Petitioner's Telephone System to It by the United States Government.	Before the Public Service Commission of Maryland Case No. 1709

WHEREAS, this Commission by its Order No. 5731, entered herein on August 18th, 1920, prescribed the rates and the charges to be charged and collected by The Chesapeake and Potomac Telephone Company of Baltimore City for telephone service furnished by the said Company in the State of Maryland from September 1st, 1920, to December 31st, 1921; and

WHEREAS, this Commission by its Order No. 6531, entered herein on December 17th, 1921, continued in effect until March 31st, 1923, the rates and charges prescribed as aforesaid by the said Order No. 5731; and

WHEREAS, said The Chesapeake and Potomac Telephone Company of Baltimore City has petitioned this Commission for permission and authority to file and make effective as of December 1st, 1922, fourth revision of Sheet No. 2 of the said Company's rate schedule P. S. C. Md. No. 107, reducing the charge for individual line flat rate residence service furnished through the Washington suburban central office districts from $5.50 per month to $5.00 per month; and

WHEREAS, the Commission being of the opinion and finding that the change proposed by the revised sheet aforesaid is reasonable and proper, and should be permitted and authorized,

IT IS, THEREFORE, this 29th day of November, in the year Nineteen Hundred and Twenty-two, by the Public Service Commission of Maryland,

ORDERED: (1) That The Chesapeake and Potomac Telephone Company of Baltimore City be and it is hereby permitted and authorized to file and make effective as of December 1st, 1922, fourth revision of Sheet No. 2 of the said Company's rate schedule P. S. C. Md. No. 107, reducing the charge for individual line flat rate residence service furnished through the Washington suburban central office districts from $5.50 per month to $5.00 per month; in accordance with specimen copy of the said revised sheet filed herein.

(2) That Order No. 6531 entered herein by the Commission on December 17th, 1921, be and it hereby is modified so as to permit the change in rates by the first paragraph of this order authorized, and to that extent only.

WILLIAM M. MALOY
J. FRANK HARPER,
EZRA B. WHITMAN,
Commissioners.

ORDER No. 7522

In the Matter of The Application of THE CHESAPEAKE AND POTOMAC TELEPHONE COMPANY OF BALTIMORE CITY for permission and Authority to File and Publish a Schedule of Rates to be Effective Upon the Return of the Petitioner's Telephone System to It by the United States Government.	Before the Public Service Commission Of Maryland Case No. 1709

WHEREAS, this Commission by its Order No. 5731 entered herein on August 18th, 1920, authorized and directed rates and charges to be charged and collected by The Chesapeake and Potomac Telephone Company of Baltimore City for telephone service furnished by the said Company in the State of Maryland on and after September 1st, 1920, to and including December 31st, 1921, which said rates and charges were continued in effect until midnight of March 31st, 1923, by Order No. 6531, entered herein by the Commission on December 17th, 1921; and

WHEREAS, the said The Chesapeake and Potomac Telephone Company of Baltimore City has filed with the Commission a petition praying that the Commission continue in effect beyond midnight of March 31st, 1923, the rates and charges so authorized and directed to be charged and collected by the said Company by the aforesaid Order No. 5731, and so continued in effect by the aforesaid Order No. 6531; and

WHEREAS, the petition having come on to be heard on March 19th, 1923, after due notice, and it appearing from the testimony offered and the exhibits filed at the hearing had on that date that the net telephone revenues of the said The Chesapeake and Potomac Telephone Company of Baltimore City under the rates and charges aforesaid equated to a rate of return of 5.71% during the year ended December 31st, 1922, (without making any allowance for certain adjustments charged direct to surplus) upon the tentative average fair value of the property of The Chesapeake and Potomac Telephone Company of Baltimore City during the year ended on the said date, which said tentative average fair value is reached by taking as the base the fair value of the property of The Chesapeake and Potomac Telephone Company of Baltimore City heretofore established by the Commission as $16,725,532 as of December 31st, 1919, and adding thereto capital additions and deducting therefrom capital retirements; and

WHEREAS, it being the opinion and finding of the Commission after investigation and hearing that the aforesaid rates and charges should be continued in effect,

IT IS, THEREFORE, this 23rd day of March, in the year Nineteen Hundred and Twenty-three, by the Public Service Commission of Maryland,

ORDERED: (1) That the rates and charges authorized and directed by the Commission's Order No. 5731 entered herein on August 18th, 1920, to be charged and collected by The Chesapeake and Potomac Telephone of Baltimore

City for telephone service furnished by the said Company in the State of Maryland, which said rates and charges were continued in effect by Order No. 6531, entered herein by the Commission on December 17, 1921, with such modifications in the said rates and charges as have been made from time to time, be, and they hereby are continued in effect from midnight of March 31st, 1923, until midnight of March 31st, 1924, unless in the meantime this order shall be modified or abrogated, in whole or in part, by the Commission.

(2) That the Chesapeake and Potomac Telephone Company of Baltimore City shall furnish this Commission accurate and complete statements under oath, and in convenient form, setting forth the revenues, operating expenses, and other expenditures of the Company during each month; such reports to be furnished as soon as may be reasonably practicable and convenient after the end of each calendar month during the period this order remains effective.

(3) That a copy of this order be served upon said The Chesapeake and Potomac Telephone Company of Baltimore City, and that said Company within ten (10) days of the date of service of such copy shall notify the Commission in writing whether or not it will accept and abide by the same.

WILLIAM M. MALOY.
J. FRANK HARPER.
EZRA B. WHITMAN.
Commissioners.

ORDER No. 8163

In the Matter of

The Application of THE CHESAPEAKE AND POTOMAC TELEPHONE COMPANY OF BALTIMORE CITY for Permission and Authority to File and Publish a Schedule of Rates to be Effective Upon the Return of the Petitioner's Telephone System to It by the United States Government.

Before the Public Service Commission of Maryland

Case No. 1709

Upon petition of The Chesapeake and Potomac Telephone Company of Baltimore City, and after due consideration by the Commission, it is, this 20th day of March, in the year Nineteen Hundred and Twenty-four, by the Public Service Commission of Maryland,

ORDERED: (1) That the rates and charges authorized and directed by the Commission's order No. 5731 entered herein on August 18th, 1920, to be charged and collected by The Chesapeake and Potomac Telephone Company of Baltimore City for telephone service furnished by the said company in the State of Maryland, which said rates and charges were continued in effect by Order No. 6531, entered herein by the Commission on December 17th, 1921, and by Order No. 7522 entered herein by the Commission on March 23rd, 1923, with such modifications in the said rates and charges as have been made from time to time, be and they hereby are continued in effect from midnight of March 31st, 1924, until midnight of June 30th, 1924, unless in the meantime this order shall be modified or abrogated, in whole or in part, by the Commission.

(2) That The Chesapeake and Potomac Telephone Company of Baltimore City shall furnish this Commission accurate and complete statements under oath, and in convenient form, setting forth the revenues, operating expenses, and other expenditures of the company during each month; such reports to be furnished as soon as may be reasonably practicable and convenient after the end of each calendar month during the period this order remains effective.

(3) That a copy of this order be served upon said The Chesapeake and Potomac Telephone Company of Baltimore City, and that said Company within ten (10) days of the date of service of such copy shall notify the Commission in writing whether or not it will accept and abide by the same.

EZRA B. WHITMAN,
J. FRANK HARPER,
HAROLD E. WEST,
Commissioners.

[fol. 1735] DEFENDANT'S EXHIBIT D-17

Agreement Between American Telephone and Telegraph Company and The Chesapeake and Potomac Telephone Company of Baltimore City, Covering Services, Licenses and Privileges—November 17, 1930.

[fol. 1736] This Agreement, dated this 17 day of November, 1930, between American Telephone and Telegraph Company, a corporation of the State of New York, hereinafter called the "Licensor," and The Chesapeake and Potomac Telephone Company of Baltimore City, a corporation of the State of Maryland, hereinafter called the "Licensee," witnesseth:

Whereas, the Licensee as an Associated Company of the Bell System has been and is now conducting a telephone business within the territory hereinafter defined under a certain license contract with the Licensor, particularly as evidenced by memorandum thereof dated March 2, 1922 and supplements thereto; and

Whereas, the agreement of the parties hereto that telephones manufactured under the patents of the Licensor shall be purchased by the Licensee for use within said territory rather than furnished and repaired as theretofore by the Licensor makes it desirable to state and reaffirm in this instrument the license and service contract relations which continue in force between them;

Now, therefore, in consideration of the premises and of the covenants and agreements herein set forth the parties hereto agree as follows:

1. For the purposes of this agreement:

(a) The telephone business of the Licensee is the furnishing to the public for compensation of telephone service within the territory of the Licensee as hereinafter defined.

(b) An exchange means a system established to provide telephonic communication within a particular area usually [fol. 1737] within or embracing a city, town or village and environs. This system consists of one or more central offices together with the associated plant including circuits, equipment and telephones.

(c) The term "exchange service" applies to telephone service within an exchange area.

(d) The term "toll service" applies to telephone service between exchange areas.

2. The Licensee is licensed to use within its territory all telephones and all telephonic devices, apparatus, methods and systems needed for its business as defined herein which are covered by patents now or hereafter owned or controlled by the Licensor or which it may have the right to authorize the Associated Companies of the Bell System to use; but no such telephones, telephonic devices, apparatus, methods or systems shall be disposed of by the Licensee without the consent of the Licensor except to those licensed by the Licensor to use them or to manufacturers licensed by the Licensor.

The Licensee shall be protected and saved harmless by the Licensor from all actions or suits charging infringement of patents arising from the use of any telephones or telephonic devices, apparatus, methods or systems which the Licensor may recommend.

All rights not specifically granted to the Licensee remain to the Licensor.

3. The Licensor will prosecute continuously fundamental work of research, investigation and experimentation in the development of the art and science of telephony and in the development of plans, methods, systems and ideas designed to improve telephone service and to promote safety, economy and efficiency in the equipment, construction and operation of the telephone plants of the Associated Companies of the Bell System, and will direct development work by others for the production of materials and apparatus [fol. 1738] necessary for rendering the products of such work of the Licensor available for use by such Associated Companies.

The Licensee shall have the right to use and the Licensor will render available for use by the Associated Companies of the Bell System as and when completed and standardized all products of the Licensor's fundamental work of research, investigation and experimentation, and all inventions, discoveries and patents, and all methods and systems covered by patents needed for the said business of the Licensee, and all apparatus and appliances, methods and

systems embodying such inventions, discoveries and patents, and to this end, if any patent rights held by others in any such invention or discovery are necessary to make such invention or discovery available for such use, the Licensor will, in case such invention or discovery relates to telephones, acquire the requisite patent rights therein, and, in case such invention or discovery relates to other than telephones, provide suitable arrangements for making the apparatus, appliances, methods and systems embodying such invention or discovery available for use as aforesaid; provided that each acquisition or arrangement can, in the judgment of the Licensor, be consummated on reasonable terms.

4. The Licensor will make and maintain continuously in effect adequate arrangements whereby telephones and other telephonic devices and apparatus needed for the business of the Licensee may be manufactured under all patents now or hereafter owned or controlled by the Licensor, or under which it may have the right to grant licenses to others, and whereby the Licensee may purchase such telephones, telephonic devices and apparatus for use in its territory and subject to the provisions hereof, at prices which shall be reasonable and not higher than the lowest prices charged by the manufacturer from time to time to others under similar circumstances.

[fol. 1739] 5. The Licensor will furnish to the Licensee

(a) Advice and assistance in general engineering, plant, traffic, operating, commercial, accounting (including the auditing of accounts), patent, legal, administrative and other matters pertaining to the efficient, economical and successful conduct of said business of the Licensee; such advice and assistance to be given by the Licensor through conferences with its specialists and the issuance to the Licensee of data and conclusions, including bulletins, books, circular letters, and standard specifications and drawings, and through the performance of specific work in cases of unusual magnitude and complexity where such work is necessary or desirable.

(b) Advice and assistance in any financing required to be done by the Licensee in the extension, development or improvement of its telephone system within its said territory and in the general matter of its finances; aid in securing funds on fair terms, as and when needed for new construc-

tion and other expenditures, but not, at any time, to a greater extent than the then condition of the finances and credit of the Licensor may permit; active assistance in the marketing of the Licensee's securities; and such other necessary financial support and assistance in the premises as will tend to serve the best interests of both Companies.

(c) Active assistance, cooperation and support in connection with the adoption from time to time by the Licensee of such measures as will, in the judgment of the parties hereto, best protect and preserve the health and promote the well-being in employment of the employees of the Licensee and, in other ways, conserve the high quality of its service to the public through the maintenance of a stable, contented and efficient personnel.

6. The Licensor will maintain continuously an organization of specialists trained in the various branches of the [fol. 1740] work required to be done by the Licensor in rendering the foregoing services, of such numbers and possessed of such technical knowledge and experience as will enable said work to be so done as to relieve the Licensee from the necessity of attempting to perform said work for itself.

7. The Licensor will maintain continuously or cause to be so maintained proper connections between the telephone system of the Licensee and the telephone systems of the other Associated Companies of the Bell System and between places within the territory of the Licensee which the latter is not authorized to connect.

8. The Licensee shall have the right

(a) To extend to the subscribers and other patrons of the Licensee and of its connecting companies within its said territory the privilege of using, upon payment of the regular tolls therefor, the connections herein provided between its telephone system and the telephone systems of the other Associated Companies of the Bell System for telephonic communications between such subscribers and other patrons and the subscribers and other patrons of such Associated Companies and of their connecting companies in their respective territories.

(b) For the betterment of the service throughout its said territory, to extend to its connecting companies within its

said territory, on such terms and conditions as it may determine, the benefit of such engineering and other technical advice and information with respect to construction, maintenance, repair and operation of plant as the Licensee may receive from the Licensor.

The Licensee shall not directly or indirectly connect with the lines of the Licensor or its appointees any telephone facilities which in the judgment of the Licensor would unduly impair the quality of the service.

[fol. 1741] 9. The Licensee may enjoy any of the rights of way and similar franchises of the Licensor to construct and maintain lines, which the Licensor can permit it to use, when and so long as, in the judgment of the Licensor, it shall not interfere with the enjoyment thereof by the Licensor or its other licensees, and may, to the extent and under the conditions aforesaid, use the Licensor's overhead and underground facilities for supporting or carrying wires (both open and in cable) upon paying a pro rata share of the cost of constructing and maintaining them, computed in accordance with the then existing practices of the parties, or such other reasonable compensation as may be agreed upon. For trunk lines from the several exchange offices to points outside of the respective exchanges, the Licensor may enjoy all rights of the Licensee to construct and maintain lines which the Licensee can permit it to use, when and so long as, in the judgment of the Licensee, it shall not interfere with the enjoyment thereof by the Licensee or its other licensees, and may, to the extent and under the conditions aforesaid, use the Licensee's overhead and underground facilities for supporting or carrying the Licensor's wires (both open and in cable) upon paying a pro rata share of the cost of constructing and maintaining them, computed in accordance with the then existing practices of the parties, or such other reasonable compensation as may be agreed upon. The Licensor reserves the right to use telephones on lines connecting places in the territory of the Licensee with other places in said territory which the Licensee is not authorized to connect hereunder or with places outside said territory, or connecting places outside said territory with each other. The Licensee will allow the Licensor to connect the wires of any such lines with its said lines in order to constitute thereby a through line, of which the Licensee's lines or any part of them can

form a portion or link, in order to forward through communications or messages; will make or permit to be made convenient switchboard or other connections for that pur- [fol. 1742] pose, and as compensation for such use of its lines and for making such connections will take a share of the through toll (terminal expenses being first deducted) pro rata according to distance, and will also allow any telephone exchange located outside the territory of the Licensee to be designated by the Licensor to connect with the Licensee's lines for the purpose and substantially in the manner and upon the terms herein provided in respect of such trunk line connections. In respect of all communications or messages originating on its lines and which are to be routed or forwarded over any lines of the Licensor or its appointees, the Licensee shall require the patron or subscriber to bind himself to pay the tolls thereon and to make every communication or message subject to such contracts, stipulations, and limitations of liability as the Licensor may from time to time require, in such form as it may from time to time prescribe, and will hold the Licensor harmless from all loss or expense consequent upon the Licensee's failure so to do. Whenever the consent of a commission or other public tribunal to the use by the Licensor or the Licensee of the plant or other facilities of the other is required by law, no agreement made under and pursuant to the provisions of this paragraph shall be effective until such consent is obtained.

The Licensor may enter the offices and connect with the exchanges of the Licensee any lines to points without the territory of the Licensee or to points within said territory which the Licensee is not authorized to connect, in order to establish communication between patrons of such exchanges and parties at such points reached by said lines, and may there operate said lines with suitable appliances; the Licensee will permit its patrons to use such lines and by its own operators will handle such communications or messages to and from its patrons, or make the proper switchboard or other connections for direct communication, as may be requested, and in such manner, not inconsistent [fol. 1743] with the proper conduct of its office, as the Licensor shall direct. But if the Licensor is not satisfied with the manner in which it is performed, it may establish its own offices and trunk and radiating lines for such purpose.

10. The Licensee will cause each of its exchanges to route, over the lines of the Licensor and of such parties as the Licensor may from time to time appoint, all communications to points outside the Licensee's territory, or to points within said territory which the Licensee is not authorized to connect, originating at such exchanges, on its lines, or at the exchanges or on the lines of its connecting companies within its territory, or coming on the wires or within the control of the exchange, where the Licensor or its said appointee has wires and will accept the communications, so far as the Licensee can lawfully control the same and unless otherwise specially directed by its patrons, but the Licensee will not solicit such special directions or receive or pay tolls for transmission over other lines unless compellable by law so to do. Each such communication on which the charge is reversed shall be considered as originating at the station against which the charge is to be made.

The Licensee shall keep and furnish an account of each such communication, and shall collect and on demand pay over to the Licensor or its said appointees, respectively, the tolls for transmission beyond the exchange, according to such rates and rules as each shall establish, and shall exhibit its accounts and the tickets from which they are made, so far as may be proper to verify the same. The Licensee, in the handling of all business interchanged hereunder shall observe the Licensor's operating methods and rules from time to time established for the use of its lines and shall keep such records and furnish such reports with respect thereto as the Licensor may from time to time reasonably request.

Each exchange shall, if and when so requested by the Licensor, make proper switchboard or other connection [fol. 1744] between the lines of the Licensor or its Licensees from points without such exchange and terminating in such exchange office, for the purpose thereby of making up a through line between points without such exchange. In respect of all the business referred to in this Article, the Licensee shall make no charge to its own subscriber or patron, but shall be entitled to the following compensation and none other: Upon communications originating at an exchange or toll station of the Licensee or of a connecting company of the Licensee within its territory and passing over the lines of the Licensor or its appointees compensa-

tion based upon the average revenue per originating message in accordance with the schedule of commissions set forth in Appendix A hereto attached and made part hereof; said compensation to cover the use of the necessary switchboard and trunking and other toll terminal plant and facilities and all the facilities and services of an exchange furnished for and in connection with such communications whether to or from such exchange, except the exchange service facilities required to establish connection between an exchange station and the toll terminal plant, for the use of which excepted facilities the Licensee is compensated by its rates for exchange service in such exchange. In case an exchange shall be required to make a switchboard connection for the purpose of making up a through line between points without such exchange, the exchange shall receive, for making such connection, such compensation as may be agreed upon.

11. In consideration of the premises and for all benefits accruing to the Licensee hereunder, the Licensee shall pay to the Licensor a sum equal to two and one-half per cent. (2½%) of the total gross earnings of the Licensee, which shall be payable in monthly installments, as herein provided, and in accordance with the established practice of the parties hereto, and shall be computed as follows: Such total gross earnings shall be computed by adding the fol- [fol. 1745] lowing accounts described and defined in the Uniform System of Accounts for Telephone Companies prescribed by the Interstate Commerce Commission: Account 500 Subscribers' Station Revenues, Account 501 Public Pay Station Revenues, Account 504 Private Exchange Lines, and Account 510 Message Tolls, and by deducting from the total thereof, Account 304 Uncollectible Operating Revenues. To such gross earnings of the Licensee there shall be added an amount equal to the gross earnings, similarly computed, for each other telephone company operating in the territory of the Licensee in which the Licensee owns a majority either of the voting stock or of the entire capital stock; provided, however, that on application by the Licensee for the exclusion of all or any portion of such gross revenues of any such operating company the question shall be carefully considered and determined.

The amount of each installment of said sum equal to two and one-half per cent. (2½%) of the Licensee's total gross

earnings due for each month shall be determined by such total gross earnings of the second preceding month, computed in the manner aforesaid, and a statement over the signature of the proper accounting officer of the Licensee, of its total gross earnings for each calendar month, computed in the manner aforesaid, shall be sent to the Comptroller of the Licensor, or to such other officer of the Licensor as it may theretofore designate, on or before the twenty-fifth day of the next succeeding month and payment in New York funds shall be made on or before the tenth day of the month next following, that being the month for which such payment is due.

The Licensee will make such reports, giving such information regarding the operations of its exchanges and lines as the Licensor may from time to time reasonably request.

12. If the Licensee shall fail to pay any sums due hereunder for thirty days after the same shall become payable [fol. 1746] or shall violate any other term or condition of this agreement and shall fail to remedy or repair the same for sixty days after written notice thereof from the Licensor, the Licensor may, if it shall so elect, by written notice to Licensee, terminate the rights of the Licensee hereunder and may resort to any of its rights and remedies in law or equity under the patent laws or otherwise, including the remedy by injunction against the Licensee or those claiming under it.

13. The contractual relations hereunder are personal to the Licensee, and any assignment or attempt to assign its rights hereunder or the lines established hereunder or any of them, by act of the party or operation of law, without the written consent of the Licensor, will be good ground for a cancellation hereof by the Licensor. Whenever the Licensor grants to others the rights for exchanges or any of its rights under Articles 9 and 10 hereof or for connecting lines or any other rights remaining to it, the stipulations hereof relating thereto shall be binding upon and inure to the benefit of such grantees, and the Licensor shall not be responsible for their acts or defaults. If the Licensor shall transfer to any party who shall agree to perform the stipulations hereof, its title to the patent rights under which telephones and apparatus are licensed herein, and its then existing rights hereunder, the provisions hereof shall inure to the benefit of and be binding upon such party in respect

of all things done or to be done after such assignment, as if it were named a party hereto, and the Licensor shall no longer be responsible hereunder.

14. The rights of the Licensee hereunder shall be perpetual, unless determined as herein provided.

15. The territory of the Licensee hereunder is as follows, viz.: the State of Maryland.

[fol. 1747] The Licensee, in conjunction with The Chesapeake and Potomac Telephone Company (the Licensee with respect to the District of Columbia) shall have the right to use telephones to transact business between any point in the State of Maryland and any point in the District of Columbia.

The Licensee, in conjunction with The Chesapeake and Potomac Telephone Company of Virginia (the Licensee with respect to the State of Virginia), shall have the right to use telephones to transact business between any point in the Counties of Accomac and Northampton, State of Virginia, and any point in the State of Maryland.

In witness whereof the parties hereto have caused their respective corporate seals to be hereto affixed and these presents to be subscribed in their names and behalf by their respective officers thereto duly authorized.

American Telephone and Telegraph Company, by C. P. Cooper, Vice President. C. M. B. Attest: A. A. Marsters, Secretary. (Seal.)

The Chesapeake and Potomac Telephone Company of Baltimore City, by L. B. Wilson, President. Attest: W. B. Clarkson, Secretary. (Seal.)

[fol. 1748] Appendix "A"

Average revenue per Out Message		Messages from offices where the Toll Operating is done by	
Over	But not over	American Co. Commission per Out Message	Associated Co. Commission per Out Message
	$.75	$.112	$.290
$.75	.80	.113	.295
.80	.85	.114	.300
.85	.90	.115	.305
.90	.95	.116	.310
.95	1.00	.117	.315

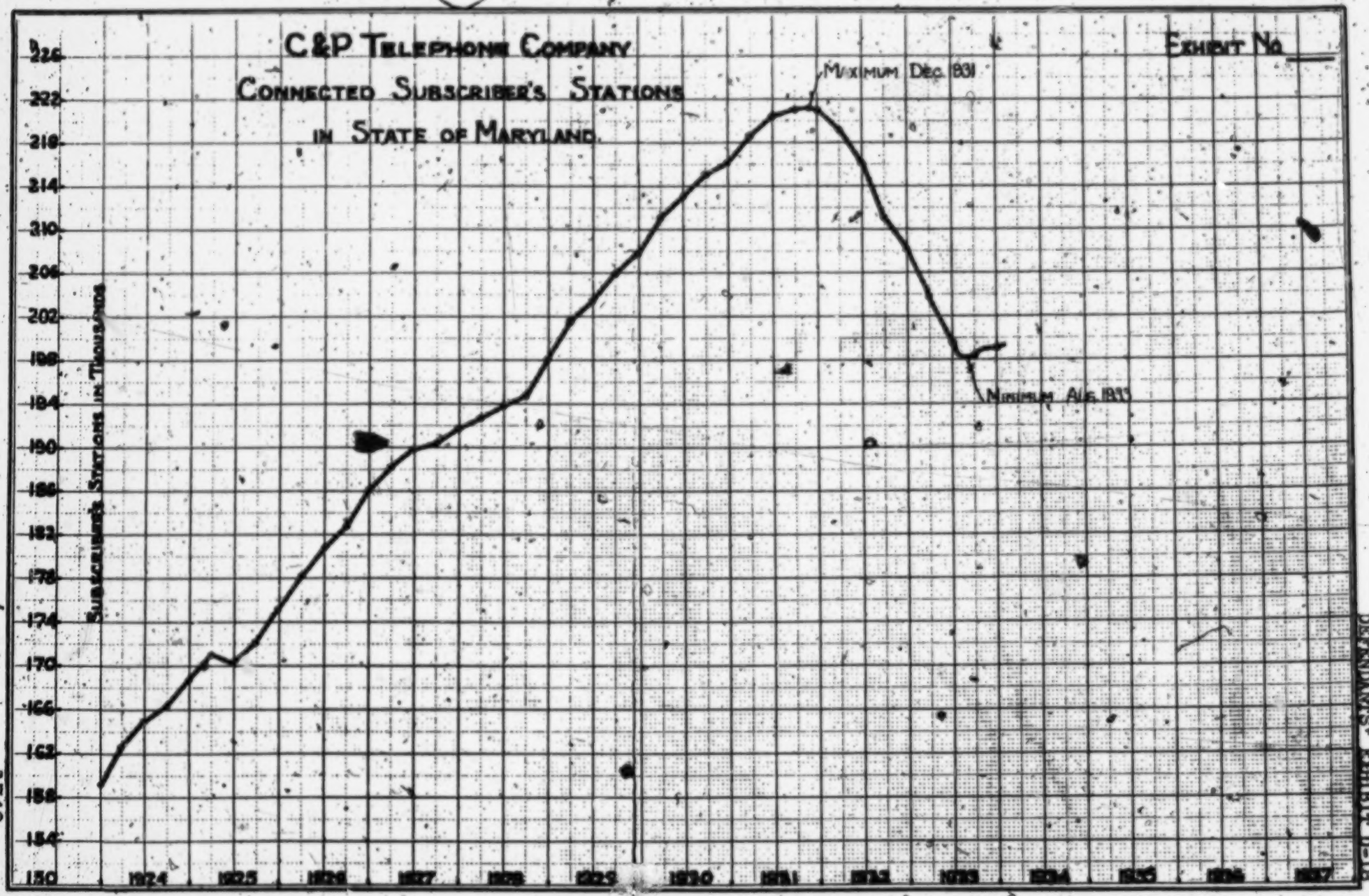
Average revenue per Out Message		Messages from offices where the Toll Operating is done by	
		American Co.	Associated Co.
Over	But not over	Commission per Out Message	Commission per Out Message
1.00	1.05	.118	.320
1.05	1.10	.118	.325
1.10	1.15	.119	.330
1.15	1.20	.119	.335
1.20	1.25	.120	.340
1.25	1.30	.120	.345
1.30	1.35	.121	.350
1.35	1.40	.121	.355
1.40	1.45	.122	.360
1.45	1.50	.122	.365
1.50	1.60	.123	.370
1.60	1.70	.124	.375
1.70	1.80	.125	.380
1.80	1.90	.126	.385
1.90	2.00	.127	.390
2.00	2.12½	.129	.400
2.12½	2.25	.129	.400
2.25	2.37½	.131	.410
2.37½	2.50	.131	.410
2.50	2.75	.132	.415
2.75	3.00	.133	4.20
3.00	3.25	.134	.425
3.25	3.50	.135	.430
3.50	3.75	.136	.435
3.75	4.00	.137	.440
4.00	4.50	.138	.450
For each increase of .50 add		.001	.005

(Here follows photolithograph, side folio 1749.)

C&P Telephone Company

Connected Subscriber's Stations in State of Maryland.

Exhibit No. ___



Defendants' Exhibit D-18

[fol. 1750]

DEFENDANTS' EXHIBIT D-19

The Chesapeake and Potomac Telephone Company of Baltimore City

Computation of Depreciation Expense—1932

		Balance Dec. 31, 1932	Depreciation Rates per cent	Depreciation expense
207	Right of Way	$934,220.00		
212	Buildings	2,881,644.54	1.5	$43,224.67
221	C. O. Telephone Equipment—Manual	7,994,306.84	2.5	199,857.67
221	C. O. Telephone Equipment—Dial	3,547,729.89	2.	70,954.60
222	Other Equipment of Central Offices	363,401.20	4.	14,536.05
231	Station Apparatus	3,832,859.28	5.	191,642.96
234	Private Branch Exchange—Non-Multiple	1,095,235.68	2.5	27,380.89
234	Private Branch Exchange—Multiple	490,071.00	2.5	12,251.77
235	Booths and Special Fittings	602,747.98	5.	30,137.40
241	Exchange Pole Lines	3,785,816.31	5.5	208,219.90
242	Exchange Aerial Cable	4,577,472.30	2.	91,549.45
243	Exchange Aerial Wire—Line—Iron	966,210.00	5.	48,310.50
243	Exchange Aerial Wire—Line—Copper	241,914.00	1.	2,419.14
243	Exchange Aerial Wire Drop	1,160,786.34		
244	Exchange Underground Conduits	3,852,902.38	1.	38,529.02
245	Exchange Underground Cable	6,209,515.07	2.	124,190.30
246	Exchange Submarine Cable	19,229.37	4.	769.17
251	Toll Pole Line	1,601,269.67	5.5	88,069.83
252	Toll Aerial Cable	924,484.34	2.	18,489.69
253	Toll Aerial Wire—Line—Iron	8,248.00	5.	412.40
253	Toll Aerial Wire—Line—Copper	867,715.39	1.	8,677.15
254	Toll Underground Conduits	149,862.46	1.	1,498.62
255	Toll Undergound Cable	868,090.65	2.	17,361.81
256	Toll Submarine Cable	58,149.06	4.	2,325.96
261	Office Furniture and Fixtures	332,974.90	8.	26,637.99
262	General Shop Equipment	1,765.00	10.	176.50

1089

DEFENDANTS' EXHIBIT D-19—Continued

263	General Store Equipment	29,856.32	8.	2,388.51
264	General Stable and Garage Equipment	299,666.36	15.	44,949.95
265	General Tools and Implements	126,810.33	10.	12,681.03
268	Interest during construction	337,636.69	2.9	9 791.46
	Total	$48,162,591.35		$1,337,434.39
201	Organization	6,960.55		
204	Other Intangible Capital	26,661.76		
232	Station Installation	1,049,960.16		
233	Interior Block Wire	82,986.25		
211	Land	661,422.62		
	Total	$49,990,582.69		

(Here follows photolighograph of side folio 1751.)

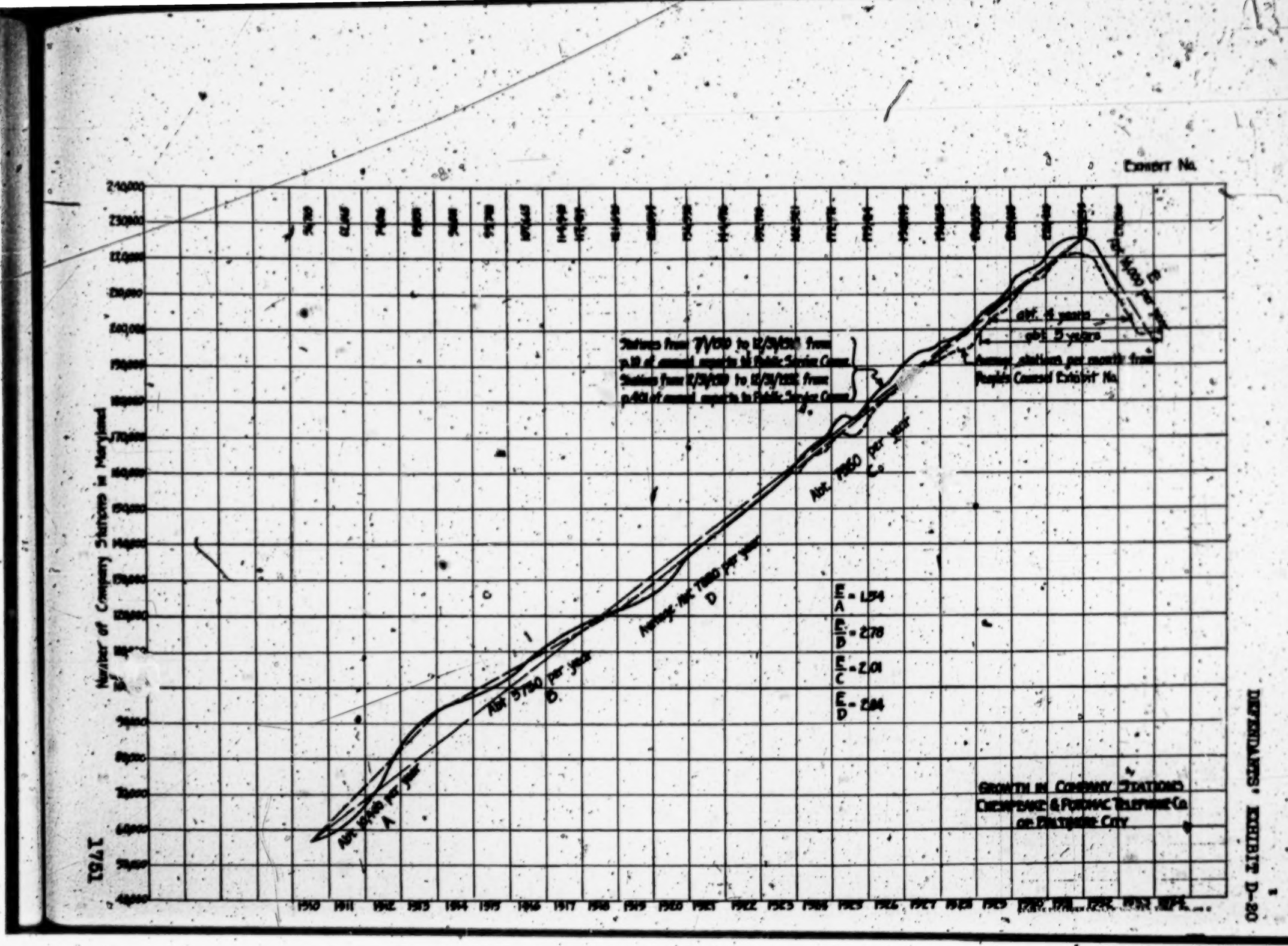


Exhibit No.
Number of Company Stations in Maryland
1947
Stations from 7/1/30 to 12/31/30 from p.10 of annual reports to Public Service Comm.
Stations from 1/31/31 to 12/31/35 from p.40 of annual reports to Public Service Comm.
Average stations per month from People's Counsel Exhibit No.
Abt. 7960 per year
Average Abt. 7380 per year
Abt. 5760 per year
Abt. 3960 per year
E/A = 1.34
E/B = 2.78
E/C = 2.01
E/D = 2.84
GROWTH IN COMPANY STATIONS
CHESAPEAKE & POTOMAC TELEPHONE Co.
OF BALTIMORE CITY
DEFENDANTS' EXHIBIT D-80

DEFENDANTS' EXHIBIT D-21

The Chesapeake and Potomac Telephone Company of Baltimore City

Current Annual Depreciation accrual Rates

1 Acct. No.	2 Account name	3 Cost values	4 Average service life in years	5 Salvage value in per cent	6 Depreciation of temporary facilities	7 Current annual depreciation accrual in per cent	8 Annual depreciation expense
207	Right of Way—						
	Exchange }	$934,220.20	...	...	...	...	...
	Toll }						
212	Buildings—						
	Manual }	2,881,644.54	100	33	...	0.67	19,307.02
	Dial }						
220	C. O. Equipment—						
	Manual	7,994,306.84	50	4	...	1.92	153,490.69
	Dial	3,547,729.89	50	0	...	2.0	70,954.60
229	Other Equipment of Central Offices	393,401.20	15	20	...	5.33	19,969.28
231	Station Apparatus	3,832,859.28	7	65	...	5.0	191,642.96
233	P. B. X.—						
	Non-multiple	1,005,235.68	9	50	...	5.56	60,896.10
	Multiple	490,071.00	12	10	...	7.5	36,753.33
235	Booths and Special Fittings	602,747.98	10	60	...	4.0	24,109.92
241	Exchange Pole Lines	3,785,816.31	25	−10	...	4.4	166,575.93
242	Exchange Aerial Cable	4,577,472.30	50	15	...	1.7	77,817.03
243	Exchange Aerial Wire—						
	Copper	241,914.00	100	0	1.5	2.5	6,047.85
	Iron	966,210.00	15	−10	1.5	8.33	85,315.34
244	Exchange Underground Conduit—Composite	3,852,902.38	115	0	...	0.87	33,520.35
245	Exchange Underground Cable—Composite	6,209,515.07	...	...	...	1.4	86,933.21
246	Exchange Submarine Cable	19,229.37	25	0	...	4.0	769.17
251	Toll Pole Lines	1,601,269.67	30	−5	...	3.5	56,044.44
252	Toll Aerial Cable	224,494.34	75	25	...	1.0	9,244.84

1091

DEFENDANTS' EXHIBIT D-21—Continued

The Chesapeake and Potomac Telephone Company of Baltimore City

Current Annual Depreciation accrual Rates

1 Acct. No.	2 Account name	3 Cost values	4 Average service life in years	5 Salvage value in per cent	6 Depreciation of temporary facilities	7 Current annual depreciation accrual in per cent	8 Annual depreciation expense
253	Toll Aerial Wire—						
	Copper	867,715.39	100	0	1.5	2.5	21,692.88
	Iron	8,248.00	15	−10	1.5	8.83	728.30
254	Toll Underground Conduit	149,862.46	150	0	...	0.67	1,004.08
255	Toll Underground Cable	868,090.65	83	0	...	1.2	10,417.09
256	Toll Submarine Cable	58,149.06	25	0	...	4.0	2,325.96
268	Interest during Construction	337,636.69	...	..	...	2.63	.....
261	Office Furniture and Fixtures	332,974.90	15	25	...	[illegible]	16,648.75
262	General Shop Equipment	1,765.00	8	20	...	10.	176.50
263	General Store Equipment	29,856.32	10	10	...	9.0	2,687.07
264	Stable and Garage Equipment	299,666.36	5	10	...	18.0	53,939.94
265	General Tools and Implements	126,810.33	5	20	...	16.0	20,289.65
	Total exclusive of Interest	$46,664,168.52	...	..	...	2.63	$1,228,704.17
	Total including Interest	$47,001,805.21	...	..	...	2.63	$1,237,584.01
201	Organization	6,960.55	...	..	...	....	.....
204	Other Intangible Capital	26,661.76	...	..	...	....	.....
232	Station Installation	1,049,960.10	...	..	...	....	.....
233	Interior Block Wire	82,986.25	...	..	...	....	.....
243	Exchange Aerial Wire Drop	1,160,786.34	...	..	...	....	.....
211	Land	661,422.62	...	..	...	....	.....
	Total Fixed Capital	$49,990,582.89	...	..	...	2.48	$1,237,584.01

[fol. 1753] Clerk's certificate to foregoing transcript omitted in printing.

[fol. 1754] IN SUPREME COURT OF THE UNITED STATES

Statement of Points to Be Relied Upon and Stipulations as to Printing Record—Filed Jan. 18, 1935

STATEMENT OF POINTS

In support of their contention that the Statutory District Court erred in the particulars pointed out in the Assignments of Error heretofore filed, appellants intend to rely upon the following points:

(Note—In accordance with a stipulation filed with the Court below the parties agreed and the Court found that the intrastate portion of the appellee's property, revenues and expenses was 85% of the total property, revenues and expenses. For convenience the total figures are referred to.)

Point I

The Court erred in finding that the minimum non-confiscatory rate base of all of the appellee's property used and useful in rendering telephone service, as of December 31, 1933, was $39,541,921.27.

(a) The Court's finding was admittedly based on historical cost, which it found to be the same as prudent investment, although the evidence showed that by far the greater portion of the plant was installed during a period of higher prices than those prevailing on the effective date of the valuation.

(b) The Court erred in substituting its judgment for the judgment of the appellants, because the proof of the appellee was lacking in the force legally required to establish that the Appellants' finding was clearly wrong.

(c) The appellants in fixing a value of $32,621,190.00, gave effect both to cost when incurred and to present value, and considered every other element of value required by law, and the value so found was fair and reasonable and supported by substantial evidence.

[fol. 1755] (d) The method of valuation used by appellants was substantially that used by the District Court itself in the previous case involving the same parties in 1925.

(e) The Court erred in assuming in its opinion that the cost of the appellee's property had been incurred at times and under circumstances and at price levels not greatly dissimilar from those prevailing at the time of the hearing and likely to prevail in the near future.

(f) The Court erroneously accorded special weight to historical cost, being led to do so and influenced by an erroneous interpretation of the "history of the relations of the Company and the Commission", and of the history of former rate cases involving the appellee, and by an erroneous application of such erroneously construed and irrelevant history to the circumstances of this case.

(g) The Court erred in failing to accord any or proper weight to the evidence of decreased costs of labor and materials prevailing at the time of the hearing as compared with the costs prevailing at the times the properties were acquired.

(h) The Court failed to give effect to the liberality of the appellants, not required by the evidence, in allowing in the fair value fixed by them a substantial excess of plant over and above present requirements for service.

(i) The Court erroneously included in its findings property owned by the appellee but not used and useful in rendering telephone service.

Point II

The Court erred in failing in its findings and opinion to give effect to, or even to mention, the action of the appellants in allowing to the appellee an excess of net return of $296,522.00, over and above the net return which would have resulted from the mathematical application of the rate of return to the fair value, both as found by the appellants.

(a) The practical effect of such excess allowance, after making adjustment for depreciation, income tax and other items of expense, and using the rate of return as found by the appellants and the Court, would be to increase by sev-

eral million dollars the fair value of $32,621,190.00 fixed by the appellants.

Point III

The appellee's evidence of value, based on a method of appraisal purporting to show reproduction cost, was based on hypothetical calculations and was so grossly in excess of the fair and reasonable value, and a fortiori the mini-[fol. 1756] mum non-confiscatory value, as to deprive it of much of its evidentiary weight and probative force.

(a) The value so claimed by the appellee was based, at least in part, on the unreasonably high prices of material and labor charged by the Western Electric Company, and on appellee's own high labor rates.

(b) The element of going value included in the appellee's value so claimed was conjectural, uncertain, based on no substantial or specific evidence, and was grossly in excess of the actual cost of establishing such value in the appellee's present plant.

(c) The "undistributed construction costs" included in the appellee's value so claimed were conjectural, uncertain, based on no specific or substantial evidence, and were grossly in excess of the actual cost of such overheads in the existing plant of the appellee.

(d) The amount deducted for accrued depreciation in the value so claimed was admittedly insufficient to include all factors of such depreciation.

(e) The amount included by the appellee for working capital in the value so claimed was excessive.

Point IV

The Court erred in finding and including as a part of the rate base, working capital in the amount of $1,000,000.

(a) The amount allowed by appellants for working capital was a finding of fact based on substantial evidence, and was fair and liberal.

(b) The amount found by the Court was an arbitrary round figure and based on no specific evidence.

(c) The Court erred in substituting its judgment for the judgment of the appellants, because the proof of the appellee was lacking in the force legally required to establish that the appellants' finding was clearly wrong.

Point V

The calculations of value and rate of return offered by the appellee would, if accepted, necessitate a finding that the appellee has been operating under confiscatory rates from 1923 through 1933, prior to the reduction in rates ordered by the appellants in this case, although the evidence clearly shows that the appellee has enjoyed remark-
[fol. 1757] able and consistent prosperity during that period, and therefore such calculations lose much of their evidentiary weight and probative force.

[fol. 1757] Point VI

The net return allowed by the appellants is not only more than a fair return upon fair value, but is also adequate to meet all of the reasonable requirements of the Appellee over and above operating expenses for interest, dividends and other fixed charges, and to provide an additional amount for surplus, and therefore the Court erred in holding that the net return so allowed was confiscatory.

Point VII

The Court erred in estimating the net revenues of the appellee for 1934 to be $2,742,005.

Point VIII

The Court's finding that the minimum non-confiscatory allowance for annual depreciation expense to be allowed as an operating expense of the appellee in the amount of $2,000,000, was excessive and erroneous.

(a) The appellants' allowance for annual depreciation expense was a finding of fact, was based on substantial evidence, and was fair and liberal under the conditions indicated by the testimony.

(b) The Court erred in failing to give proper weight to the uncontradicted evidence of the change in economic

conditions, which have substantially suspended for an indeterminate period of time in the future the current operation of inadequacy as a factor of currently accruing depreciation, which factor was, under previously existing conditions, the largest single cause of such depreciation.

(c) The rate and amount found by the Court were arbitrary round figures, based on no specific evidence as applied to separate items of depreciable property.

(d) The Court erred in substituting its judgment for the judgment of the appellants, because the proof of the appellee was lacking in the force legally required to establish that the appellants' finding was clearly wrong.

[fol. 1758] (e) The Court erroneously based its finding of annual depreciation expense on the gross cost of depreciable property of the appellee, contrary to the rule announced in United Railways & Electric Company vs. West, 280 U. S. 234.

Point IX

The Court erred in making no allowance for the fact that appellants allowed a rate of return of 6%, even though the evidence justified the allowance of a rate of 5½% as reasonable and non-confiscatory.

Point X

The Court erred in finding "that a return of less than 6% would be confiscatory under present conditions."

Point XI

The Court erred in failing to give any weight to the effect of the decrease in general price levels given in evidence, in increasing the purchasing power of the dollars of current net return to the appellee, as compared with such purchasing power prior to the present economic depression.

Point XII

The Court erred in failing to give any weight to the evidence that the subscribers to telephone service, because of decreased income during the present economic de-

pression, are now paying a larger proportion out of such income as charges for telephone service, as compared with previous years, because, as the evidence further shows, the appellee has not reduced the charges for such service in terms of dollars.

Point XIII

The Court erred in failing to give any or proper weight to the allowance by the appellants to the appellee of liberal operating expenses for 1934 and subsequent years, the disallowance of which would have been fair, reasonable and non-confiscatory.

[fols. 1759 & 1760] (a) The appellants allowed in full as operating expenses the amounts payable by the appellee to the Western Electric Company for maintenance and other items, notwithstanding abnormal and unreasonable increases in such payments in 1930 and 1934.

(b) The appellants allowed as operating expenses the full amount of the Maryland capital stock tax, although it is a tax on stockholders on their shares and not a direct tax on the appellee's property.

(c) The appellants allowed as operating expenses in full the labor rates of the appellee, although the evidence showed that such rates were higher during the years of the depression than immediately prior thereto.

Richard F. Cleveland, John Henry Lewin, Solicitors for Appellants.

Service by receipt of copy of appellants' Statement of Points to be Relied Upon is hereby acknowledged the 18 day of January, 1935.

Charles McHenry Howard, Raymond S. Williams, R. A. Van Orsdel, T. Baxter Milne, Solictors for Appellee.

[fol. 1761] STIPULATION IN LIEU OF DESIGNATION OF RECORD

In lieu of the designation and counter designation of the record to be printed, it is hereby stipulated and agreed between the parties hereto by their respective counsel, that the parties think that the entire transcript of record hereto-

fore returned and filed in this Court upon the appeal herein, is necessary for the proper consideration of the case on appeal, but that pursuant to a Stipulation as to Certain Exhibits, heretofore entered into between the parties and filed in this Court, the Clerk may omit from the printed record the undermentioned portions of the record, being parts of certain exhibits as follows:

Sheets to be Omitted in Printing	Record Reference
Plaintiff's Exhibit A-3—	
Sheets 2 to 10, incl.	Vol. II, fol. 11-28, incl.
Plaintiff's Exhibit A-7—	
Front cover sheets	Vol. II, fol. 39-40.
Sheets 2, 9-15, incl.	Vol. II, fol. 42, 49-55, incl.
Sheets 18-31, incl.	Vol. II, fol. 58-71, incl.
Sheets 36-52, incl.	Vol. II, fol. 76-92, incl.
Sheets 54-65, incl.	Vol. II, fol. 94-105, incl.
Sheets 69, 70, 72-79, incl.	Vol. II, fol. 109, 110, 112-120, incl.
Back cover sheets	Vol. II, fol. 121, 122.
[fol. 1762] Plaintiff's Exhibit A-9—	
Sheets 5-9, incl.	Vol. II, fol. 247-256, incl.
Sheets 11-35, incl.	Vol. II, fol. 259-298, incl.
Sheets 37-45, incl.	Vol. II, fol. 301-314, incl.
Sheets 47-53, incl.	Vol. II, fol. 317-330, incl.
Plaintiff's Exhibit A-30—	
Sheets 5-9, incl.	Vol. II, fol. 339-348, incl.
Sheets 11-23, incl.	Vol. II, fol. 351-376, incl.
Sheets 26-29, incl.	Vol. II, fol. 381-388, incl.
Sheets 32	Vol. II, fol. 393-394.
Plaintiff's Exhibit A-30—	
Account 222, Sheets 1-4, incl.; Account 231; Account 232; Account 233; Account 234, Sheets 1-3, incl.; Account 235.	Vol. II, fol. 561-582, incl.
Account 251, Sheets 1-3, incl.; Account 242, Sheets 1-14, incl.; Account 252, Sheets 1-11, incl.; Account 243; Account 253; Account 244, Sheets 1-6, incl.; Account 254, Sheets 1 and 2; Account 245, Main Cable, Sheets 1-11, incl.; Subsidiary Cable, Sheets 1-8, incl.; House Cable, Sheets 1-3, incl.; Block Cable, Sheets 1-3, incl.; Buried Cable, Sheets 1 and 2; Account 255, Sheets 1-10, incl.; Account 246, Sheets 1-3, incl.; Account 256, Sheets 1-3, incl.	Vol. II, Fol. 593-754, incl.

Sheets to be Omitted in Printing	Record Reference
Plaintiff's Exhibit A-32—	
Sheets 5-12, incl.	Vol. II, Fol. 795-810, incl.
Plaintiff's Exhibit A-40—	
Sheets 3-6, incl.	Vol. II, Fol. 903-910, incl.

Richard F. Cleveland, John Henry Lewin, Solicitors for Appellants. Charles McH. Howard, Raymond S. Williams, R. A. Van Orsdel, T. Baxter Milne, Solicitors for Appellee.

January 18, 1935.

[fol. 1763]

IN SUPREME COURT OF THE UNITED STATES

STIPULATION AS TO CERTAIN EXHIBITS

For the purpose of shortening the printed record in the Supreme Court of the United States, it is stipulated and agreed by counsel for the respective parties hereto—

1. That there be included in the printed records herein, Sheet 1 of Plaintiff's Exhibit A-3, being a summary of Additions to and Retirements from Fixed Capital by accounts for the years 1924 to 1932, inclusive, and the last two sheets (Sheets 11 and 12) of the said exhibit for the year 1933. Sheets 2 to 10, inclusive, to be omitted from the printed record, are identical in form and contain detailed information by years from 1924 to 1932, inclusive, all of the information shown thereon having been taken from the books of the Plaintiff and summarized without mathematical error to arrive at the results shown on Sheet 1 of said exhibit.

2. That there be included in the printed record herein, a complete copy of Plaintiff's Exhibit A-8, entitled "Uniform System of Accounts for Telephone Companies, prescribed by the Interstate Commerce Commission in accordance with Section 20 of the Interstate Commerce Act, First Revised Issue," effective on January 1, 1933, and Pages 1, 3 to 8, inclusive, 16, 17, 32 to 35, inclusive, 53, 66, 67, 68, and 71 of Plaintiff's Exhibit A-7, being the first Issue of said Uniform System of Accounts, effective on Jannary 1, 1913. The pages of Exhibit A-7 to be omitted in accordance herewith, [fol. 1764] contain accounting rules and regulations identical in form with the corresponding rules and regulations contained in Exhibit A-8, except that the latter have been

brought up to date and modified in certain particulars, as to which no issue is raised on this appeal.

3. That there be included in the printed record herein, Sheets 1 to 4, inclusive, 10, 36, and 46 of Plaintiff's Exhibit A-9, entitled "Appraisal of Buildings as of December 31, 1932." The sheets to be omitted from said exhibit are identical in form with Sheet 10 and contain detailed information as to the several individual buildings. The information shown on the sheets to be omitted in accordance herewith, has been summarized without mathematical error to arrive at the result shown in Sheets 1 to 4, inclusive, of said exhibit.

4. That there be included in the printed record herein, Sheets 1 to 4, inclusive, 10, 24, 25, 30, 31, and 33 of Plaintiff's Exhibit A-10, entitled "Appraisal of Buildings as of December 31, 1933." The sheets to be omitted from said exhibit are identical in form with Sheet 10 and contain detailed information as to the several individual buildings. The information shown on the sheets to be omitted in accordance herewith, has been summarized without mathematical error to arrive at the result shown in Sheets 1 to 4, inclusive, of said exhibit.

5. That there be included in the printed record herein certain pages of Plaintiff's Exhibit A-30, containing 122 pages, entitled "Book Costs and Units of Property, December 31, 1932 and December 31, 1933," as follows:

Sheet 1—Summary;

Land—Account 211, Sheets 1 to 8, inclusive, being the description and book cost of each parcel of land owned by plaintiff;

Buildings—Account 212, Sheets 1 to 10, inclusive, being the description and book cost of each building owned by plaintiff;

[fol. 1765] Central Office Equipment—Account 221, Sheets 1 to 6, inclusive, being the description and book cost by location of central office equipment;

Exchange Pole Lines—Account 241, Sheets 1 to 5, inclusive, being a statement of the numerical units of property.

The sheets for Multiple Private Branch Exchanges, Account 234, to be omitted from the printed record in accordance herewith, are similar in form to the sheets for Central Office Equipment, Account 221. The sheets for the remain-

ing accounts to be omitted from the printed record in accordance herewith, set out the numerical units of property for the Station Equipment accounts, including non-multiple private branch exchanges, and for the accounts known as Outside Plant accounts, which accounts comprise toll pole lines, wires, conduit, and cables, said omitted sheets being similar in form to the sheets for Exchange Pole Lines, Account 241.

That all the information shown in Plantiff's Exhibit A-30, has been taken from the books of the Plaintiff.

6. That there be included in the printed record herein, a complete copy of Plaintiff's Exhibit A-31, entitled "Estimated Reproduction Cost New, Estimated Reproduction Cost Less Depreciation, as of December 31, 1932," and Sheets 1 to 4, inclusive, of Plaintiff's Exhibit A-32, entitled "Estimated Reproduction Cost New, Estimated Reproduction Cost Less Depreciation, as of December 31, 1933." The sheets of Exhibit A-32 to be omitted in accordance herewith, namely, Sheets 5 to 12, inclusive, are identical in form with Sheets 6, 8 to 12, inclusive, 14, and 15 of Exhibit A-31, and show the corresponding data as of December 31, 1933.

That the methods employed in the studies identified as Plaintiff's Exhibit A-32, were identically the same methods as shown in Exhibit A-31, except for the variations specifically disclosed in the testimony of witnesses, which variations Appellants do not question and shall not question in [fol. 1766] the Supreme Court.

That the methods employed in the preparation of Exhibit A-32, were applied without mathematical error to arrive at the results shown on the Summary Sheet (Sheet 1) of said Exhibit A-32.

7. That there be included in the printed record herein, the first two sheets of Plaintiff's Exhibit A-40, a comparison of actual 1933 charges to Account 608, Depreciation of the associated operating companies of the Bell System with amounts based on current depreciation rates of the plaintiff, the sheets to be omitted in accordance herewith, being identical in form with Sheet 2, and containing the computations by accounts for the individual companies summarized on Sheet 1 of said exhibit. That the information shown on the sheets to be omitted has been summarized without mathematical error in order to arrive at the results shown on Sheet 1 aforesaid.

8. That appellants shall not raise any question as to the accuracy or correctness of the data in any exhibit, where such data were based on the exhibits or parts thereof omitted from the printed record in accordance herewith, nor shall appellants raise any issue that the figures shown in any exhibit are unsupported because of the omission from the printed record of certain exhibits or parts thereof in accordance herewith.

9. That appellants shall not contend that appellee failed to sustain the burden of proof by reason of the fact that in accordance herewith certain exhibits or parts thereof have been omitted from the printed record.

Richard F. Cleveland, John Henry Lewin, Solicitors for Defendants-Appellants. Charles McH. Howard, Raymond S. Williams, R. A. Van Orsdel, T. Baxter Milne, Solicitors for Plaintiff-Appellee.

January 18th, 1935.

[fol. 1767] File endorsement omitted.

Endorsed on cover: File No. 39,276. Maryland, D. C. U. S. Term No. 648. Harold E. West, J. Frank Harper and Stewart Purcell, constituting the Public Service Commission of Maryland, Appellants, vs. Chesapeake and Potomac Telephone Company of Baltimore City. Filed January 15, 1935. File No. 648, O. T., 1934.